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#### ABSTRACT .

A survey was initiated in May, 1978; to determine the status of state policies and practices regarding energy education at four levels: state education agencies, state offices of energy, governor's offices and state legislatures. Four different questionnaires were constructed and sent tc designated officials of those agencies listed above in each state. A total of 208 questionnaires were mailed. Analysis of data from 55.8% of the questionnaires plus direct follow-up is included in this final report which represents approximately 70% of the agencies surveyed. Conclusions include: (1) A major lack of cooperation among state agencies exists; (2) The greatest amount cf. K-12 energy education communication exists between state education officies and state energy agencies; (3) Most K-12 energy education programs reviewed are designed for integration into existing curricula; (4) Most programs reviewed are geared for science and social studies classes; and (5) Energy education materials are available for all grade levels. Appendices include: (1) survey instruments: (2) responses to open-ended items; and (3) a list of submitted materials. (Author/MR)

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THE STATUS OF STATE ENERGY EDUCATION POLICY

FINAL REPORT

EDUCATION COMMISSION OF THE STATES

September 11, 1978-

Prepared for Education Commission of the States by Energy Information Associates, Inc., Littleton, Colorado (Provided Through Grant # EU-78-G-01-6241 from US Department of Energy)

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### Abstract

A survey was initiated in May, 1978, to determine the status of state policies and practices regarding energy education at four levels: state education agencies, state offices of energy, governor's offices and state legislatures. Four different questionnaires were constructed and sent to designated officials of those agencies listed above in each state. A total of 208 questionnaires were mailed. Analysis of data received as of July 7, 1978, from 55.8% of the questionnaires was included in a preliminary report of that date. That data plas information received as a result of direct follow-up since July 7 is included in this final report, which represents input from approximately 70% of the agencies surveyed.

### I. Introduction

During the past several years following the 1973 OPEC embargo, there has been an "explosion" of energy education materials developed for the nation's schools with a concomitant duplication of effort.

Further, communication among states and within states was either lacking or non-existent regarding the availability of materials and the existence of governing policies, recommendations or resolutions regarding K-12 energy education (EE).

Although several public and private organizations have attempted to organize data and disseminate information related to the energy issue, the Education Commission of the States (ECS) was not able to identify a sustained effort to collect 50-state information with the goal of developing model state level policies and approaches to energy education.

In an attempt to provide assistance to states in their efforts to implement effective K-12 energy education programs, ECS undertook a project which will provide relevant information needed for state planning.

### II. Method

In May, 1978, four questionnaires with accompanying cover letters were developed, one for each of the following levels of state government: state education agencies (SEA's), state energy offices (SEO's), governor's offices (GO's), and state legislatures (SL's).

Each questionnaire, designed specifically for its target audience, contained up to eight items which varied from the closed-response type to open-ended questions. Additionally, one item, repeated on all four



instruments, was designed to measure intra-state agency communication inobtrusively.

Agency officials were identified, and 208 questionnaires were mailed (52 to each level), complete with stamped, pre-addressed return envelopes. Respondents were instructed to refrain from rerouting the questionnaires to other state agencies to avoid data contamination.

As questionnaires were received, they were checked off on a state-by-agency matrix and examined for completeness. Enclosures were cataloged and filed. Notations indicating apparent questionnaire rerouting were made. Extensive oral and written follow-up was conducted, urging respondents to complete and return the questionnaires as soon as possible, and additional copies of instruments were sent to replace those which were lost.

A copy of each of the questionnaires ( with summary statistics) is included in Appendix A of this report.

# III. Findings

# A. Response

To date, 146 questionnaires (70.2% of the number sent) have been returned and analyzed. Table 1 contains a breakdown of response by state agency.

Table 1. Agency Response

Agency	No. Respondents	Per Cent of Agencies Surveyed
SEA	43	82.7
SE0	35	67 <sub></sub> 3
GO .	25	48.1
, SL	43	82.7
TOTAL	146 (70.2%)	

The greatest response has been from the state education agencies and state legislatures, followed by state energy offices. The poorest response was received from the nation's governors' offices.

### B. National Findings

### 1. State Education Agencies

Final analysis indicates that approximately 75% of all SEA's have at least one staff person whose direct responsibilities include K-12 energy education. Of the 7.7% of those SEA's having no one in charge of K-12 energy education, one-fourth stated that these responsibilities are delegated to other state agencies. Approximately 17.3% did not return the questionnaire. Table 2 summarizes these findings.

Table 2. SEA's and K-12 Energy Education

SEA staff member in charge of K-12 EE	No SEA staff member in charge of K-12 EE	Unknown*
39 . (75%)	4 (7.7%)	9 (17.3%)
	other state no other state agency in agency in charge	
	1 (25%)	

Of the fifty-two SEA's surveyed, 19 (36.5%) had issued "any policies, rules, recommendations or guidelines regarding K-12 energy education"; 23 (44.2%) had not, and one respondent was not sure.

Statements issued by SEA's were general and informal in character, ranging from recommendations which encourage school districts to participate

<sup>\* &</sup>quot;unknown" refers to agencies which did not return the questionnaire or did not respond to a given item.

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energy education activities and district administrators to engage in energy audit and conservation practices to formal position statements. One SEA (Idaho) had issued a recommended emergency plan to be used by local school districts in the event of energy supply curtailment. Another, the Minnesota Department of Education, had developed literary statements for K-12 energy education to be used as a basis for curriculum projects; and Wyoming's State Board of Education passed a general policy strongly advocating energy education programs for its school districts. Piease see "Responses to Open-Ended Items" below for detailed statements.

Twenty-two or 42.3% of the fifty-two SEA's surveyed reported that no rules or recommendations concerning the integration or infusion of K-12 EE had been made by their agencies. The majority of the twenty-one SEA's which had done so indicated their recommendations advocated K-12 EE programs exist as "permitted instructional modules" at both elementary and secondary levels. It should be noted that "mandatory" refers to the required offering of K-12 EE programs at the local district level. Table 3 summarizes this data.

Table 3. SEA Recommendations Regarding K-12 Integration of EE, Per Cent of Recommendations

Recommendations	Number, (Per Cent)
"permitted instructional modules"	16 (57.1)
"mandatory instructional modules"	3 (10.7)
"elective courses"	8 (28,6)
"required courses"	. 1 (3.6)

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An equal number of responses for the elementary and secondary levels was obtained for "permitted instructional modules" (16), for "mandatory instructional modules (2) and for "required courses" (1). Elective

EE courses recommended for the secondary level outnumber those for the elementary by nearly two to one.

Copies of energy curricular materials were enclosed with some completed questionnaires. Most materials would be classified as curriculum guides developed by local SEA's and/or local school districts, and were of the packet or manual type. Most included energy "lesson plans" for immediate classroom implementation. A few were the results of cooperative SEA/SEO efforts.

Less than one-fifth of the SEA's (19.2%) had completed research involving K-12 energy education since 1973. Most research involved periodic review and evaluation of available materials and existing programs, as well as statewide needs assessment surveys. One SEA (Washington) had completed an annotated bibliography of energy/environmental resources, and another (Wyoming) had engaged in K-12 energy education developmental research.

Current research is being conducted by 9 (17.3%) of the SEA's, 32 (61.5%) are not currently involved, two respondents (3.8%) did not know whether K-12 energy education research was being conducted at this time and 9 (17.3%) did not return the questionnaire. The nature of current research is similar to that described in the preceding paragraph. For detailed comments, please refer to the responses listed for Item 4 below.

Twelve SEA's (23.1%) had received special funding for other K-12



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energy education projects; 30 (57.7%) had not and one representative was not sure. "Special projects" included development of grade specific curriculum enrichment materials (lowa, Washington), implementation of energy awareness workshops for teachers (Ohio), and the development of a comprehensive K-I2 energy education/conservation program (Hawaii).

Twenty SEA's (38.5%) reported exemplary energy education programs being conducted in school districts in their states; eighteen (34.6%) reported none, and five SEA's (9.6%) were not sure. The majority of programs are similar in character to those described above; however, California (San Diego) reports "very effective city-county environmental-energy program involving a number of public and private agnecies", and the Southern California Edison Co. "has conducted a number of excellent programs and activities, and has organized a city-county education committee" in Rosemead. One SEA (Missouri) reported "most Missouri school districts" are integrating energy education efforts into existing science and social studies programs.

In response to the querie asking whether SEA's had developed energy education curriculum guides, 18 (34.6%) responded affirmatively, 23 (44.2%) negatively, and 11 SEA's (21.2%) failed to respond. Several SEA's (Alabama, Delaware, Hawaii, Idaho, Montana, South Dakota, Texas and Virginia) reported their work on curriculum guide development is in progress at this time.

Thirteen SEA's reported energy related materials (other than energy curriculum guides) developed by their offices. These ranged in Scope from K-12 environmental education (including energy) booklets, manuals

and guides (California, South Carolina, Indiana, Virginia, Maryland, New York) to traffic safety curricula, Sun Day Calendars and "Conserv-Action Krazy Kits" (Washington).

Relative to curricular materials developed by outside agencies,

SEA's have recommended usage of the three major programs: The National
Science Teachers Association's Project for an Energy-Enriched Curriculum (PEEC), Energy and Man's Environment (EME), Energy and Society and
the Biological Science Curriculum Study (BSCS) project, in that order.
In addition, less well-known materials have been advocated for usage.
Table 4 summarizes these findings.

Table 4\*. SEA-Recommended Materials; Per Cent of All SEA's

		•		and the second s
	PEEC	.14	(26.9%)	•
	EME	12	(23.1%)	
	BSCS	8	(15.4%)	
	US DOE (excl. PEEC)	_ 3	(5.8%)	
·	Locally developed	. ś	(5.8%)	
	"Energy & Order"	1	(1.9%)	
	None	. 17	(32.7%)	:
	Unknown	. ,10	(19.2%)	<u> </u>

<sup>\* (</sup>Please note that several SEA's recommend usage of more than one program in their school districts.)

Table 5 includes findings regarding SEA provision of teacher inservice activities in K-12 energy education.

Table 5. SEA-Sponsored Inservices, Per Cent of All SEA's

7	Provide Inservice Activities	Provide No Inservice Activities	ι	Inknown
•	22 (42.3%)	19 (36.5%)	11	(21.2%)

·

Most inservices are energy awareness and implementation workshops, specifically designed for designated grade levels, and may involve one or more cooperating school districts. One SEA (Rhode Island) reported joint conferences for K-12 educators with the State's Energy Office. In Iowa teachers must attend a minimum of ly inservice hours in order to obtain energy teaching materials. Oklahoma and Utah SEA's offer regular workshops in energy curriculum development and for training of teachers involved in the Energy Conservation Corp Project, respectively.

In response to an item designed to measure inobtrusively state interagency communication and cooperation, it was found that over one-half of the respondent SEA's was aware of-SL and GO involvement or non-involvement in K-12 energy education programs. However, over three-fourths was knowledgeable about SEO involvement or non-involvement.

Table 6 summarizes this data.

Table 6. SEA Awareness of K-12 Energy Education Involvement/Non-Involvement of Other Agencies, Per Cent of All SEA's

Agency	Aware	Unaware	Unknown
SL	28 (53.8%)	15 (28.9%)	9 (17.3%)
GO .	29 (55.8%)	14 (26.9%)	9 (17.3%)
SEO .	40 (76.9%)	3 (5.8%)	9 (17.3%)
Other state agencies	10 (19.2%)	33 (63.5%)	9 (17.3%)

### 2. State Energy Offices

. Twenty-one SEO's (40.4%) stated that some, form of K-12 energy education was incorporated in their states original conservation plan; fourteen SEO's (26.9%) indicated no inclusion. Implementation of an

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energy education component is occurring in twenty-eight (53.8%) states. Five of the twenty-one SEO's which have had K-12 energy education incorporated in their original plans have amended those sections. Table 7 summarizes these findings.

Table 7. K-12 Energy Education Included in State Conservation Plans, Per Cent

•	Some Form of K Education Incl Original State tion Plan	uded in	No From of K Education In Original Sta tion Plan	cluded in	Ùnknown
	- 21 (40	.4%)	14 (	26.9%	17 (32.7%)
	Education Com- ponents Currently Being Imple- mented	Not Cur- rently Being Im- plemented	Plan Now Includes Education- al Compo- nent	Plan Does Not Now Include Education- al Component	
	20 (95.2%)	1 (4.8%)	8 (57.1%)	6 (42.9%)	
	Original Edu- cational Com-			3	
•	ponent Amended	Component Not Amended			ementing K-12 EE
<u>.</u> ^	5 (23.8%)	16 (76.2%)			(53.8%)

Educational programs developed/implemented through SEO's include providing energy information upon request to students, educational involvement with civic, voc-tech schools and K-12 educators (Connecticut): curriculum development (Hawaii, Indiana); workshops (Missouri), driver education (Mississippi), cooperative work with the SEA and Audubon Society and a mini-grants program (Maine); and the development of a five-day mini-unit complementing the application of the residential energy audit

in Colorado's junior high schools.

In response to the item concerning K-12 energy education funding, twenty-three (44.2% of all states surveyed or 65.7% of respondents) indicated through the Energy Conservation and Production Act (ECPA) of 1975. Many SEO's fund their educational components through a combination of sources, including the Energy Extension Service (EES). Fifteen states (28.8%) indicated that all or part of their EE funds were supplied through the Energy Policy and Conservation Act (EPCA) of 1975. Table 8 presents these findings.

Table 8. Funding Sources for SEO Involvement in K-12 Energy Education, Per Cent of All States\*

			Funding	Sources .	•	
	EPCA	ECPA	EES	State Grants	Other	Unknown
15	(28.8%)	23 (44.2%)	3 (5.8%)	3 (5.8%)	5 (9.6%)	17 (32.7%)

<sup>\*</sup> Percentages do not total 100% due to multiple funding sources in some states.

Twenty-six SEO's (50.0%) reported that they have at least one member of their staff who has been charged with the responsibilities for K-12 energy education; three (5.8%) have no one in charge, and twenty-three SEO's did not respond.

In response to the inter-agency communication item, it was discovered that SEO's are most aware of the K-12 energy education involvement (or non-involvement) of SEA's than of other state agencies. Table 9 indicates these findings.

Table 9. SEO Awareness of K-12 Energy Education Involvement/Non-Involvement of Other Agencies, Per Cent of All SEO's

Agency	Aware	Unaware	Unknown
SL	20 (38.5%)	15 (28.8%)	17 (32.7%)
GO	24 (46.2%)	11 (21.2%)	17 (32.7%)
SEA	29 (55.8%)	6 (17.5%)	17 (32.7%)
Other state agenc	ies 9 (17.3%)	26 (50.0%)	17 (32.7%)

### 3. State Legislatures

Most responding state legislatures (83.7%) have not concerned themselves with K-12 energy education. Seven responded affirmatively to the first item on the SL questionnaire, indicating that they have "enacted any laws, passed any resolutions or made any recommendations" regarding energy education. The nature of this legislation varies from state to state and includes provisions for: an annual "Energy Week" (Illinois), the SEO development of energy education programs (Iowa, Kansas), encouraging and reaffirming the need for conservation of fuel in school buildings and transportation systems (Montana). Rhode Island indicated a recommendation had been made to school district superintendents that one hour per week be devoted to K-12 EE.

Nineteen states have an active legislative committee with K-12 energy education responsibilities. Most of these committees are House/Senate Education Committees, some are Natural Resources Committees, and a few are Energy Committees.

Only one state (Pennsylvania) had allocated any money (\$60,000) for K-12 energy education since 1973. The others (97.7%) of respon-

dents, had allocated none; and no responding state legislature had mandated funding for "any  $K_{-1}2$  energy education studies or research".

Interestingly, most <u>responding SL's</u> were aware of SEA (80%) and SEO (72%) involvement/lack of involvement in energy education, but less than one-half were appriased of GO involvement. Table 10 presents the findings for all SEO's surveyed.

Table 10. St Awareness of K-12 Energy Education Involvement/Non-Involvement of Other Agencies, Per Cent of All States

Agency		Aware	Unaware	Unknown
GO	1	20 (38.5%)	23 (44.2%)	9 (17.3%)
SE0		31 (59.6%)	12. (23.1%)	9 (17.3%)
SEA,		36 (69.2%)	7 (13.5%)	9 (17.3%)
Other state	agencie	s 4 (7.7%)	39 (75.0%)	9 (17.3%)

### 4. Governor's Offices

Only 25 or 48.1% of the GO questionnaires were returned; therefore, the reader is urged to extrapolate findings with caution. Perhaps the poor return rate is due to the fact that, in many states, SEO's are considered to be part of the governor's cabinet. As a result many GO questionnaires were rerouted to SEO's and/or were considered duplicative.

Thirteen GO's indicated their states have a "staff member" charged with K-12 energy education responsibilities. In two cases (Georgia, Hawaii), the Director of the Energy Resources Division is so charged; while in Colorado, Wyoming, South Carolina, these responsibilities actually have been delegated to the SEO. In only two responding states (Florida, Indiana) is there a "governor's assistant" in charge of K-12 energy education activities for that office.

Only three states, Florida, Ohio and Delaware, reported that their governors had issued statements or signed legislation affecting K-12 energy aducation. Florida's governor issued a statement urging support of the national SUN DAY effort, May 3, 1978; the governor of Ohio signed H.B. No. 419 which required Ohio's public schools to "emphasize and enorgage energy and resource conservation beginning in the primary grades"; and Delaware's governor signed Executive Order No. 9 (3-9-1977) which called for the "development of educational curriculum for energy resource management" under the supervision of the newly created Energy Resources Management Commission. The vast majority of GO's has issued no executive orders or statements concerning energy education.

Eight responding GO's described involvement in K-12 EE as "supporting". In contrast, five GO's checked "no involvement". Ten respondents perceived GO involvement as "sponsoring" or "initiating", and two used all three descriptors to describe their involvements.

Of the ten GO's "sponsoring" or "initiating" EE programs, six appropriated funds in FY 1977:

Delaware:		\$10,000
Colorado:	•	1,200
Georgia:		2,250
Hawaii:	•	3,000
Indiana:		190,000
Utah:		40,000

Three other states (New Hampshire, Oklahoma, Wyoming) indicated plans for future funding.



Table 11 summarizes findings related to GO awareness of energy education programs in other agencies. It is noteworthy that nearly all respondents were aware of SEO and SEA involvement.

Table 11. GO Awareness of K-12 Energy Education Involvement/Non-Involvement of Other Agencies, Per Cent of All States

Agency	Aware	Unaware	Unknown
SL	18 (34.6%)	7/(13.5%)/	27 (51.9%)
SE0	25 (48.1%)	0 (0.0%)	27 (51.9%)
SEA	24 (46.2%)	1 (1.9%)	27 (51.9%)
Other state agenci	es 4 (7.7%)	21 (40.4%)	27 (51.9%)

### C. State - Specific Findings

The following information briefly summarizes each state's involvement in K-12 energy education.

#### **ALABAMA**

- 1. The Alabama State Department/of Education has:
- Yes a. someone on staff responsible for K-12 energy education?
- No b. issued policies, recommendations, guidelines and/or rules?
- No c. completed or is involved in energy education research?
- No d. knowledge of exemplary programs?
- Yes e. developed an energy/education curriculum guide?
- No f. recommended usage of one or more nationally available energy education programs?
- Yes g. conducted teacher inservice training in energy education?
  - 2. Alabama's Energy Management Board has:
- Yes a. an energy education component(s) of its state conservation activities?
- No b. implemented or is now implementing energy education activities?
- Yes c. someone on staff responsible for K-12 energy education?
  - 3. Alabama's Governor's Office has: (Information supplied by Alabama Department of Education)
- No a. someone on staff responsible for K-12 energy education?
- No b. issued an executive order and/or statement regarding K-12 energy education?
- No c. committed funding to special K-12 energy education projects?



# Alabama (continued) 4. Alabama's legislature has: enacted laws, passed resolutions and/or made recommendations covering K-12 energy education? a committee whose responsibilities include K-12 energy education? appropriated funds for K-12 energy education? ALASKA 1. Alaska's Governor's Office has: someone on staff responsible for K-12 energy education? issued an executive order and/or statement regarding K-12 energy education? committed funding to special K-12 energy education projects? Information from other state agencies has not been received. ARIZONA 1. The Arizona State Department of Education has:. someone on staff responsible for K-12 energy education? Yes b. issued policies, recommendations, guidelines and/or rules? c. completed or is involved in energy education research? d. knowledger of exemplary programs? Yes developed an energy education curriculum guide? recommended usage of one or more nationally available energy education programs? conducted teacher inservice training in energy education? Arizona's Energy Office has: an energy education component(s) of its state conservation activities? implemented or is now implementing energy education activities? Yes c. someone on staff responsible for K-12 energy education? 3. No information has been received from Arizona's Governor's Office. . 4. Arizona's state legislature has: enacted laws, passed resolutions and/or made recommendations cover-

Yes b. a committee whose responsibilities include K-12 energy education?

appropriated funds for K-12 energy education?

ing K-12 energy education?

#### ARKANSAS

- 1. Arkansas's State Department of Education has:
- No a. someone on staff responsible for K-12 energy education?
- No b. issued policies, recommendations, guidelines and/or rules?
- No c. completed or is involved in energy education research?
- No d. knowledge of exemplary programs?
- No e. developed an energy education curriculum guide?
- Yes f. recommended usage of one or more nationally available energy education programs?
- No g. conducted teacher inservice training in energy education?
- 2. The Arkansas Office of Energy has:
- <u>No</u> a. an energy education component(s) of its state conservation activities?
- No b. implemented or is now implementing energy education activities?
- No c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from the Arkansas Governor's Office.
- 4. The Arkansas Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
  - Yes\_b. a committee whose responsibilities include K-12 energy education?
  - No C. appropriated funds for K-12 energy education?

#### CALIFORNIA

- 1. California's Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
    - Yes b. issued policies, recommendations, guidelines and/or rules?
    - Yes c. completed or is involved in energy education research?
    - <u>Yes\_d.</u> knowledge of exemplary programs?
    - No e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - No g. conducted teacher inservice training in energy education?
- 2. The California Office of Energy has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?



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### California (continued)

- 3. California's Governor's Office has:
  - No a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
- 4. California's Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?

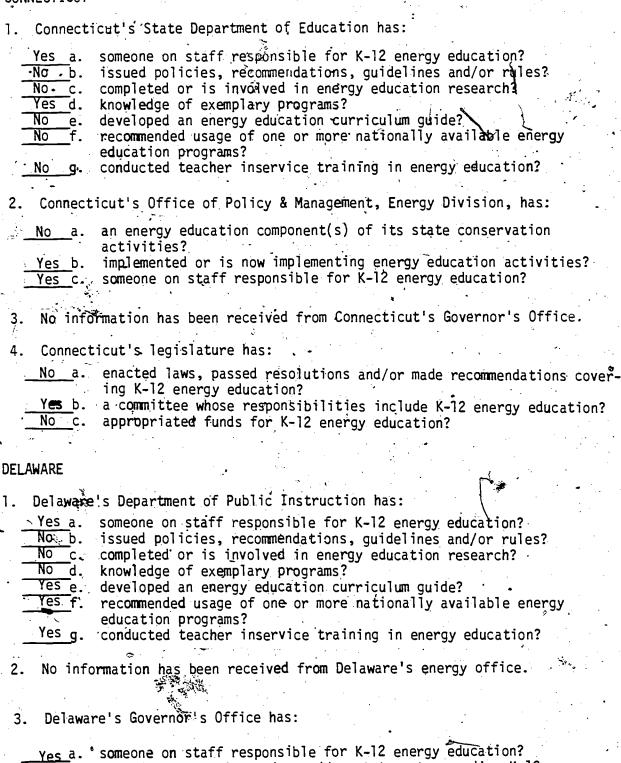
    Yes c. appropriated funds for K-12 energy education?

#### COLORADO

- 1. Colorado's Department of Education has:
  - No \_a. someone on staff responsible for K-12 energy education?
  - No b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - No d. knowledge of exemplary programs?
  - No e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - No g. conducted teacher inservice training in energy education?
- 2. Colorado's Office of Energy Conservation has:
- Yes an energy education component(s) of its state conservation activities?
- Yes b. implemented or is now implementing energy education activities?
- Yes c. someone on staff responsible for K-12 energy education?
- 3. The Colorado Governor's Office has: (Information supplied by SEO)
  - No a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - Yes-c. committed funding to special K-12 energy education projects?
- 4. Colorado's Legislature has:
  - Mo a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?



### CONNECTICUT



issued an executive order and/or statement regarding K-12 energy

committed funding to special K-12 energy education projects?

education?

### laware (continued)

- 4. Delaware's State legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education? No c. appropriated funds for K-12 energy education?

#### DISTRICT OF COLUMBIA

No information has been received from District of Columbia agencies.

#### FLORIDA

- 1. Florida's Department of Education has:
  - someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
    Yes c. completed or is involved in energy education research?

  - Yes d. knowledge of exemplary programs?
  - developed an energy education curriculum guide? No e.
  - recommended usage of one or more nationally available energy No education programs?
  - conducted teacher inservice training in energy education?
- 2. Florida's State Energy Office has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - implemented or is now implementing energy education activities?
  - someone on staff responsible for K-12 energy education?
- The Florida Governor's Office has:
  - Yes  $\tilde{a}$ . someone on staff responsible for K-12 energy education?
  - Yes b. issued an executive order and/or statement regarding K-12 energy education?
  - Yes c. committed funding to special K-12 energy education projects?
- The Florida Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

1.	Goergia's	Department	of	Education	has:
			. • •		

- Yes a. someone on staff responsible for K-12 energy education?
- No b. issued policies, recommendations, guidelines and/or rules?
- No c. completed or is involved in energy education research?
- No d. knowledge of exemplary programs?
- No e. developed an energy education curriculum guide?
- Yes f. recommended usage of one or more nationally available energy education programs?
- No g. conducted teacher inservice training in energy education?

### 2. Georgia's Office of Energy Resources has:

- Yes a. an energy education component(s) of its state conservation activities?
- Yes b. implemented or is now implementing energy education activities?
- Yes c. someone on staff responsible for K-12 energy education?

### 3. Georgia's Governor's Office has: (information provided by the SEO)

- No a. someone on staff responsible for K-12 energy education?
- No b. issued an executive order and/or statement regarding K-12 energy education?
- Yes c. committed funding to special K-12 energy education projects?

### 4. Georgia's State Legislature has: -

- No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
- Yes b. a committee whose responsibilities include K-12 energy education?
- No c. appropriated funds for K-12'energy education?

### HAWAII

### 1. Hawaii's education agency has:

- Yes a. someone on staff responsible for K-12 energy education?
- No b. issued policies, recommendations, guidelines and/or rules?
- Yes c. completed or is involved in energy education research?
- Yes d. knowledge of exemplary programs?
- No e. developed an energy education curriculum guide?
- No f. recommended usage of one or more nationally available energy education programs?
- No g. conducted teacher inservice training in energy education?

# 2. Hawaii's State Energy Office has:

- No a. an energy education component(s) of its state conservation activities?
- Yes b. implemented or is now implementing energy education activities?
- <u>Yes</u> c. someone on staff responsible for K-12 energy education?

waii (continued)

- 3. Hawaii's Governor's Office has:
  - someone on staff responsible for K-12 energy education?
  - issued an executive order and/or statement regarding K-12 energy education? --
  - committed funding to special K-12 energy education projects?
- 1. Hawaii State Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

### DAHO

- Idaho's State Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?

    No .C. completed or is involved in energy education research?
  - - Yes d. knowledge of exemplary programs?
  - developed an energy education curriculum guide? Yes ë.
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?
- Idaho's State Energy Office has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - implemented or is now implementing energy education activities? γ<sub>es</sub>b.
- someone on staff responsible for K-12 energy education? Yes C.
- No information has been received from Idaho's Governor's office.
- 4. Idaho's Legislature has: -
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - a committee whose responsibilities include K-12 energy education?
  - c. appropriated funds for K-12 energy education?

#### ILLINOIS -

- The Illinois Office of Education has:
  - someone on staff responsible for K-12 energy education?
  - No b. issued policies, recommendations, guidelines and/or rules? No c. completed or is involved in energy education research?

  - \_e. developed an energy education curriculum guide?
  - recommended usage of one or more nationally available energy education programs?
  - conducted teacher inservice training in energy education?

### Illinois (continued)

- 2. No information has been received from the Illinois office of energy.
- 3. No information has been received from the Illenois Governor's office:
- 4. The Illinois Legislature has:
  - Yes'a. enacted laws, passed resolutions and/or made recommendations con-.
    cerning K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

#### INDIANA

- 1. The Indiana education agency has:
  - Yes a someone on staff responsible for K-12 energy education?
  - No b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - No d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?
- 2. The Indiana Department of Commerce, Energy Group, has:
  - No a: an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities? Yes c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from the Indiana Governor's office.
- 4. The Indiana Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?
    - No c. appropriated funds for K-12 energy education?

#### IOWA

- 1. The Iowa Department of Public Instruction has:
  - Yes \_a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
  - Yes c. completed or is involved in energy education research?
  - Yes d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - <u>Yes</u> f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?



### Iowa (continued)

- 2. No information has been received from Iowa's energy office.
- 3. No information has been received from Iowa's Governor's office.
- 4. The Iowa Legislature has:
  - Yes a. enacted laws, passed resolutions and/or made recommendations con-/ cerning K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

#### KANSAS

- 1. The Kansas Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
  - No b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - Yes d. knowledge of exemplary programs?
  - No e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - No g. conducted feacher inservice training in energy education?
- 2. The Kansas Energy Office has:
  - No a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on taff responsible for K-12 energy education?
- 3. No information has been received from the Kansas Governor's office.
- 4. The Kansas Legislature has:
  - Yes a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b, a committee whose responsibilities include K-12 energy education?
    No c appropriated funds for K-12 energy education?

#### KENTUCKY

- 1. No information has been received from Kentucky's education agency.
- 2. Kentucky's Department of Energy has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities? Someone on staff responsible for K-12 energy education?
- 3. No information has been received from the Kentucky Governor's office.



		nued)

4.	The	Kentuc	:ky	Legis	lature	has:

- No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
- Yes b. a committee whose responsibilities include K-12 energy education?
- No c. appropriated funds for K-12 energy education?

#### LOUISIANA

- Louisiana's Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
    - ? b. issued policies, recommendations, guidelines and/or rules?
    - ? c. completed or is involved in energy—education research?
  - ? d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - f. recommended usage of one or more nationally available energy education programs?
  - ? g. -conducted teacher inservice training in energy education?
- 2. The Louisiana Energy Conservation Office has:
  - No a. an energy education component(s) of its state conservation activities?
  - No b. implemented or is now implementing energy education activities?
  - No c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from Louisiana's Governor's office.
- 4. The Louisiana Legislature has:
  - No. a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - <u>Yes</u> b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

#### MAINE

- 1. Maine's Department of Education has:
  - a. someone on staff responsible for K-12 energy education?
  - No b. issued policies recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - No. d. knowledge of exemplary programs?
    - No e. developed an energy education curriculum quide?
    - No for recommended usage of one or more nationally available energy education programs?
    - No g. conducted teacher inservice training in energy education?

### Maine (continued)

- 2. Maine's Office of Energy Resources has:
  - No \_a. an energy education component(s) of its state conservation activities?
  - Yes\_b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?
- 3. Maine's Governor's Office has:
  - No a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
- 4. No information has been received from Maine's Legislature.

#### MARYLAND

- 1. The Maryland Department of Education has:
  - yes a. someone on staff responsible for K-12 energy education?
  - No b. issued policies, recommendations, guidelines and/or rules?
  - yes c. completed or is involved in energy education research?
  - No d. knowledge of exemplary programs?
  - yes e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - No. g. conducted teacher inservice training in energy education?
- 2. No information has been received from Maryland's Energy Office.
- 3. No information has been received from Maryland's Governor's Office.
- 4. No information has been received from Maryland's Legislature.

#### **MASSECHUSETTS**

- No information has been received from Massachusetts' education agency.
- 2. No information has been received from Massachusetts' energy office.
- No information has been received from Massachusetts' Governor's office.
- 4. Massachusetts' Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
    - No b. a committee whose responsibilities include K-12 energy education?
    - No \_c. appropriated funds for K-12 energy education?



#### MICHIGAN -

- No information has been received from Michigan's Department of Education.
- 2. The Michigan Energy Extension Service has:

  - Yes b. implemented or is now implementing energy education activities?

    Yes c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from Michigan's Governor's Office.
- 4. The Michigan State Legislature has:
  - Yes \_a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

### **MINNESOTA**

- 1. The Minnesota Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
    - Yes b. issued policies, recommendations, guidelines and/or rules?
  - Yes c. completed or is involved in energy education research?
  - Yes d. knowledge of exemplary programs?
  - No e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?
- Minnesota's Energy Agency has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?
- 3. Minnesota's Governor's Office has:
  - No a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
- $\mathbf{4}_{\mathbf{x}}$  No information has been received from the Minnesota Legislature.

#### MISSISSIPPI

1. No information has been received from Mississippi's education agency.

### Mississippi (continued)

- Mississippi's Eyel and Energy Management Commission has:
  - Yes\*a. an energy education component(s) of its state conservation activities?
  - implemented or is now implementing energy education activities? Yes\*b.
  - Yes\*c. someone on staff responsible for K-12 energy education? \* applies to drivers' education programs only
- No information has been received from Mississippi's Governor's office.
- 4. The Mississippi Legislature has:
  - enacted laws; passed resolutions and/or made recommendations concerning K-12 energy education?
  - a committee whose responsibilities include K-12 energy education?
  - appropriated funds for K-12 energy education?

### **MISSOURI**

- 1. The Missouri Department of Education has:
  - someone on staff responsible for K-12 energy education?
  - issued policies, recommendations, guidelines and/or rules?
  - No completed or is involved in energy education research?
  - No knowledge of exemplary programs? d.
  - No developed an energy education curriculum guide?
  - recommended usage of one or more nationally available energy education programs?
- conducted teacher inservice training in energy education?
- 2. The Missouri Department of Natural Resources, Energy Program has:
  - an energy education component(s) of its state conservation activities?
    - Yes implemented or is now implementing energy education activities?
- someone on staff responsible for K-12 energy education? Yes
- 3. No information has been received from Missouri's Governor's Office.
- 4. The Missouri Legislature has:
  - enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - a committee whose responsibilities include K-12 energy education? appropriated funds for K-12 energy education?

#### MONTANA

- Montana's Office of Public Instruction has:
  - someone on staff responsible for K-12 energy education? Yes a.
  - Yes b. issued policies,recommendations, guidelines and/or rules?
  - completed or is involved in energy education research? Yes c.
  - Yes d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - conducted teacher inservice training in energy education?



### Montana (continued)

	1			
2.	/ Montana's	Energy	Office	has:

- No a. an energy education component(s) of its state conservation
  activities?
- Yes b. implemented or is now implementing energy education activities?
- <u>Yes</u> c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from Montana's Governor's office.

### 4. The Montana Legislature has:

- Yes a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
- Yes · b. a committee whose responsibilities include K-12 energy education?

  No c. appropriated funds for K-12 energy education?

#### NEBRASKA

- 1. The Nebraska Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
    - No b. issued policies, recommendations, guidelines and/or rules?
    - No c. completed or is involved in energy education research?
    - No d. knowledge of exemplary programs?
    - No e. developed an energy education curriculum guide?
    - Yes f. recommended usage of one or more nationally available energy education programs?
    - No g. conducted teacher inservice training in energy education?

### 2. Nebraska's Energy Office has:

- Yes a. an energy education component(s) of its state conservation
  activities?
- Yes b. implemented or is now implementing energy education activities?
- Yes c. someone on staff responsible for K-12 energy education?

# 3. Nebraska's Governor's Office has: (information supplied by SEO)

- No a. someone on staff responsible for K-12 energy education?
- No b. issued an executive order and/or statement regarding K-12 energy
- No c. committed funding to special K-12 energy education projects?

# 4. Nebraska's Legislature has:

- No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
- No b. a committee whose responsibilities include K-12 energy education?
- No c. appropriated funds for K-12 energy education?



#### NEW JERSEY

- No information has been received from the New Jersey education agency.
- 2. New Jersey's Department of Energy has:
  - a. an energy education component(s) of its state conservation activities?
  - b. implemented or is now implementing energy education activities?
  - No c. someone on staff responsible for K-12 energy education?
- No information has been received from the New Jersey Governor's Office.
- New Jersey's Legislature has:
  - a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - a committee whose responsibilities include K-12 energy education?
  - c. appropriated funds for K-12 energy education?

#### NEW HAMPSHIRE

- 1. The New Hampshire Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
- Yes b. issued policies, recommendations, guidelines and/or rules?
- No c. completed or is involved in energy education research?
  Yes d. knowledge of exemplary programs?
- No e. developed an energy education curriculum quide?
- recommended usage of one or more nationally available energy No f. education programs?
- Yes g. conducted teacher inservice training in energy education?
- 2. The New Hampshire Governor's Energy Policy Council has:
  - No \_a. an energy education component(s) of its state conservation activities?
  - implemented or is now implementing energy education activities?
  - No c. someone on staff responsible for K-12 energy education?
- 3. New Hampshire's Governor's Office has: (information supplied by SEA)
  - someone on staff responsible for K-12 energy education? Yes a.
  - issued an executive order and/or statement regarding K-12 energy No b. education?
  - committed funding to special K-12 energy education projects?
- 4. The 'New Hampshire Legislature has:
  - a. enacted laws, passed resolutions and/or made recommendations concerning ,K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?
  - c. appropriated funds for K-12 energy education?



#### **NEW MEXICO**

- T. New Mexico's Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?...
  - No b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - ?\_ d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - No g. conducted teacher inservice training in energy education?
- 2. No information has been received from New Mexico's Energy Office.
- 3. New Mexico's Governor's Office has:
  - No a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
- 4. No information has been received from New Mexico's Legislature.

#### **NEW YORK**

- 1. New York's State Education Department has:
- Yes\_a. someone on staff responsible for K-12 energy education?
- No b. issued policies, recommendations, guidelines and/or rules?
- Yes c. completed or is involved in energy education research?
- No d. knowledge of exemplary programs?
- Yes e. developed an energy education curriculum guide?
- No f. recommended usage of one or more nationally available energy education programs?
- yes, q. conducted teacher inservice training in energy education?
- 2. No information has been received from New York's energy office.
- 3. No imformation has been received from New York's Governor's office.
- 4. New York's Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?



1. TI	ne Ne	evada D	epartment	of	Education	has:
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- Yes a. someone on staff responsible for K-12 energy education?
  Yes b. issued policies, recommendations, guidelines and/or rules?
- No c. completed or is involved in energy education research?
- Yes d. knowledge of exemplary programs?
- No e. developed an energy education curriculum guide?
- Yes f. recommended usage of one or more nationally available energy education programs?
- No g. conducted teacher inservice training in energy education?

### 2. The Nevada Department of Energy has:

- Yes a an energy education component(s) of its state conservation activities?
- Yes b. implemented or is now implementing energy education activities?
- Yes c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from Nevada's Governor's office.

### 4. Nevada's legislature has:

- No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
- No b. a committee whose responsibilities include K-12 energy education?
- No c. appropriated funds for K-12 energy education?

### NORTH CAROLINA

- No information has been received from North Carolina's education agency.
- 2. North Carolina's Energy Division has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?

## 3. North Carolina's Governor's Office has:

- No a. someone on staff responsible for K-12 energy education?
- No. b. issued an executive order and/or statement regarding K-12 energy education?
- No c. committed funding to special K-12 energy education projects?

### North Carolina (continued)

- 4. North Carolina's Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?

    No c. appropriated funds for K-12 energy education?

#### NORTH DAKOTA

- 1. North Dakota's Department of Public Instruction has:
  - No a. someone on staff responsible for K-12 energy education?
    No b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - No d. knowledge of exemplary programs?
  - No e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - No g. conducted teacher inservice training in energy education?
- 2. North Dakota's Energy Office has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
    Yes c. someone on staff responsible for K-12 energy education?
- 3. No information has been received from North Dakota's Governor's Office.
- 4. North Dakota's Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?

    No c. appropriated funds for K-12 energy education?

#### OHIO

- Ohio's Department of Public Instruction has:
  - Yes a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - No d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?



### Ohio (continued)

- 2. No information has been received from Ohio's energy office.
- 3. The Ohio Governor's Office has: (information supplied by SEO)
  - No. a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
- 4. No information has been received from Ohio's Legislature.

### OKLAHOMA

- 1. Oklahoma's Department of Education has:
- Yes a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - Yes d. knowledge of exemplary programs?
  - Yes e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?
- Oklahoma's Department of Energy has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?
- 3. Oklahoma's Governor's Office has: (information supplied by SEA)
  - No \_a. someone on staff responsible for K-12 energy education?
  - No b: issued an executive order and/or statement regarding K-12 energy education?
  - <u>Yes</u>c. committed funding to special K-12 energy education projects?
- 4. The Oklahoma Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations/cover-ing K-12 energy education?
  - No b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funcs for K-12 energy education?

### OREGON

- 1. No information has been received from Oregon's education agency.
- 2. No information has then received from Oregon's energy office.

### Oregon (continued)

- 3. The Oregon Governor's Office has: (information supplied by SEA)
  - someone on staff responsible for K-12 energy education?
  - b. issued an executive order and/or statement regarding K-12 energy education?
  - committed funding to special K-12 energy education projects? No
- 4. Oregon's Legislature has:
  - enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - a committee whose responsibilities include K-12 energy education?
  - c. appropriated funds for K-12 energy education?

### PENNSYLVANIA

- 1. Pennsylvania's Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
  - issued policies, recommendations, guidelines and/or rules?

  - developed an energy education curriculum quide?
  - recommended usage of one or more nationally available energy education programs?
    - conducted teacher inservice training in energy education?
- No information has been received from Pennsylvania's energy office.
- No information has been received from Pennsylvania's Governor's office.
- Pennsylvania's Legislature has:
  - enacted laws, passed resolutions and/or made recommendations concerning K- energy education?
  - a committee whose responsibilities include K-12 energy education?
  - c. appropriated funds for K-12 energy education?

### PUERTO RICO

- Puerto Rico's Department of Education has: (information supplied by Office of Federal Affairs)
  - Yes a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines, and/or rules?
  - completed or is involved in energy education research?
  - knowledge of exemplary programs? Yes d.
  - developed an energy education curriculum guide? Yes e.
  - recommended usage of one or more nationally available energy education programs?
  - conducted teacher inservice training in energy education?

### Puerto Rico . (continued)

- 2. No information has been received from Puerto Rico's energy office.
- No information has been received from Puerto Rico's Governor's office.
- 4. No information has been received from Puerto Rico's Legislature.

### RHODE ISLAND

- 1. Rhode Island's education agency has:
  - No a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - No d. knowledge of exemplary programs?,
  - Yes e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?
- 2. No information was received from Rhode Island's energy office.
- 3. No information was received from Rhode Island's Governor's office.
- 4. Rhode Island's Legislature has:
- Yes a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
- No b. a committee whose responsibilities include K-12 energy education?

  No c: appropriated funds for K-12 energy education?

### SOUTH CAROLINA

- 1. South Carolina's education agency has:
  - Yes a someone on staff responsible for K-12 energy education?
  - Yes b. issued policies recommendations, guidelines and/or rules?
    Yes c. completed or is involved in energy education research?
  - yes d. knowledge of exemplary programs?
  - <u>Yes</u> e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservice training in energy education?
- 2. South Carolina's Energy Management has:
  - No a. an energy education component(s) of its state conservation activities?
  - No b. implemented or is now implementing energy education activities? c. someone on staff responsible for K-12 energy education?

### South Carolina (continued)

- 3. South Carolina's Governor's Office has

  - No a someone on staff responsible for K-12 energy education?

    No b issued an executive order and/or statement regarding K-12 energy
  - education?
    No c committed funding to special K-12 energy education projects?
- South Carolina's Legislature has:
  - a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - No bis a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

### SOUTH DAKOTA

- South Dakota's Department of Elementary and Secondary Education has:
  - someone on staff responsible for K-12 energy education?
  - \_b. issued policies, recommendations, guidelines and/or rules?
    - completed or is involved in energy education research?
  - Yes d. knowledge of exemplary programs?
  - <u>Yes</u>e. developed an energy education curriculum guide?
  - recommended usage of one or more nationally available energy education programs?
  - conducted teacher inservice training in energy education?
- South Dakota's Energy Conservation Office has:
  - an energy education component(s) of its state conservation ætivities?
  - Wes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?
  - No information has been received from South Dakota's Governor! office.
- South Dakota's Legislature has: (Information supplied by SEQ)
  - enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - b. a committee whose responsibilities include K-12 energy education?
  - c. -appropriated funds for K-12 energy education?



### TENNESSEE .

- No information has been received from Tennessee's education agency.
- Tennessee's Energy Authority has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes to implemented or is now implementing energy education activities? Yes c. someone on staff-responsible for K-12 energy education?
- Tennessee's Governor's Office has:
  - someone on staff responsible for K-T2 energy education?
  - issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
- No information has been received from Tennessee's Legislature.

### TEXAS

- The Texas Educational Agency has:
  - a. someone on staff responsible for k-12 energy education?
  - b. issued policies, recommendations, guidelines and/or rules?
- c. completed or is involved in energy education research?
- e. developed an energy education curriculum guide? Yes
- f. recommended usage of one or more nationally available energy education programs?
- g. conducted teacher inservice training in energy education?
- 2. No information has been received from the Texas energy office.
- No Information has been received from the Texas Governor's office.
- 4. The Texas Legislature has:
  - \_a. enacted laws, passed resolutions and/or made recommendations cover-' ing K-12 energy education?
  - \_b. a committee whose responsibilities include K-12 energy education?
  - c. appropriated funds for K-12 energy education?

### UTAH

- 1. The Utah State Board of Education has:
  - someone on staff responsible for K-12 energy education? Yes `
  - issued policies, recommendations, guidelines and/or rules?
  - completed or is involved in energy education research?.
  - knowledge of exemplary programs?
  - No e. developed an energy education curriculum quide?
  - recommended usage of one or more nationally available energy education programs?
  - conducted teacher inservice training in energy education?



### Utah (continued)

- 2. Utah's Energy Office has:
  - Yes \_a. an energy education component(s) of its state conservation activit
  - b. implemented or is now implementing energy education activities?
  - c. someone on staff responsible for K-12 energy education?
- 3. Utah's Governor's Office has:
  - someone on staff responsible for K-12 energy education?
  - issued an executive order and/or statement regarding K-12 energy
  - Yes c. committed funding to special K-12 energy education projects?
- Utah's Legislature has: (information supplied by SEO)
  - a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
  - a committee whose responsibilities include K-12 energy education?
  - c. sappropriated funds for K-12 energy education?

### **VERMONT** -

- Vermont's Department of Education has:
  - ≪Yes a. someone on staff responsible for K-12 energy education?
  - issued policies, recommendations, guidelines and/or rules?
  - completed or is involved in energy education research? knowledge of exemplary programs?
  - d.
  - developed an energy education curriculum guide? e.
  - recommended usage of one or more nationally available energy No education programs?\_\_\_\_
  - conducted teacher inservice training in energy education?
- No information has been received from Vermont's energy office.
- No information has been received from Vermont's Governor's office.
- 4.: Vermont's Legislature has:
  - a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - a committee whose responsibilities include K-12 energy education?
  - appropriated funds for K-12 energy education?

### VIRGINIA

- 1. The Virginia Department of Education has:
  - Yes a. someone on staff responsible for K-1% energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
  - completed or is involved in energy education research?
    - <u>Yes\_d. knowledge of exemplary programs?</u>
  - No e. developed an energy education curriculum guide?
  - No f. recommended usage of one or more nationally available energy -education programs?
  - Yes g. conducted teacher inservice training in energy education?

### <u>Virginia: (continued)</u>

- 2. Virginia's Energy Office has:
  - Yes a. an energy education component(s) of its state conservation activities? Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?
- 3. Virginia's Governor's Office has:
  - someone on staff responsible for K-12 energy education?
  - issued an executive order and/or statement regarding K-12 energy b. education?
  - No \_c. committed funding to special K-12 energy education projects?
- Virginia's Legislature has:
  - enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
- a committee whose responsibilities include K-12 energy education?
  - appropriated funds for K-12 energy education?

### SAMOA

- Samoa's Department of Education has:
  - Yes a. someone on staff responsible for K-12 energy education?
  - b. issued policies, recommendations, guidelines and/or rules?
  - completed or is involved in energy education research?
  - knowledge of exemplary programs?
  - developed an energy education curriculum guide? No
  - recommended usage of one or more nationally available energy education programs?
  - conducted teacher inservice training in energy education?
- No information has been received from Samoa's energy office.
- No information has been received from Samoa's Governor's office.
- No information has been received from Samoa's Legislature.

### WASHINGTON

- 1. Washington's Department of Public Instruction has:
  - Yes\_a. someone on staff responsible for K-12 energy education?
  - Yes b. issued policies, recommendations, guidelines and/or rules?
  - completed or is involved in energy education research? Yes c.
  - knowledge of exemplary programs? No d.
  - Yes e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - Yes g. conducted teacher inservicé training in energy education?
- No information has been received from dashington's energy office.



### Washington (continued)

- ,3. Washington's Governor's Office has:
  - No a. someone on staff responsible for K-12 energy education?
  - No b. issued an executive order and/or statement regarding K-12 energy education?
  - No c. committed funding to special K-12 energy education projects?
  - 4. Washington's Legislature has:
    - No a. enacted laws, passed resolutions and/or made recommendations concerning K-12 energy education?
    - No b. a committee whose responsibilities include K-12 energy education?
    - No c. appropriated funds for K-12 energy education?

### WEST VIRGINIA

- West Virginia's Department of Education was unable to supply the requested information at this time because it is in "the process of determining the responsibilities in this area".
- 2. West Virginia's Fuel & Energy Office has:
  - Yes a. an energy education component(s) of its state conservation activities?
  - Yes b. implemented or is now implementing energy education activities?
  - Yes c. someone on staff responsible for K-12 energy education?
  - No information has been received from West Virginia's Governor's office.
- 4. West Virginia's Legislature has:
  - No \_a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

### WISCONSIN

- 1. Wisconsin's Department of Public Instruction has:
  - Yes a. someone on staff responsible for K-12 energy education?
  - No b. issued policies, recommendations, guidelines and/or rules?
  - No c. completed or is involved in energy education research?
  - Yes d. knowledge of exemplary programs?
  - No e. developed an energy education curriculum guide?
  - Yes f. recommended usage of one or more nationally available energy education programs?
  - Yes q. conducted teacher inservice training in energy education?



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### Wisconsin (continued) Wisconsin's energy office has: Yes\_a. an energy education component(s) of its state conservation activities? Yes b. implemented or is now implementing energy education activities? someone on staff responsible for K-12 energy education? Yes c. The Wisconsin Governor's Office has: someone on staff responsible for K-12 energy education? issued an executive order and/or statement regarding K-12 energy education? committed funding to special K-12 energy education projects? Wisconsin's Legislature has: enacted laws, passed resolutions and/or made recommendations covering K-12 energy education? a committee whose responsibilities include K-12 energy education? appropriated funds for K-12 energy education? WYOMING Wyoming's Department of Education has: No a., someone on staff responsible for K-12 energy education? issued policies, recommendations, guidelines and/or rules? completed or is involved in energy education research? Yes c. knowledge of exemplary programs? Yes d. developed an energy education curriculum guide? e. recommended usage of one or more nationally available energy education proframs? conducted teacher inservice training in energy education? 2. Wyoming's Office of Energy Conservation has: Yes a. an energy education component(s) of its state conservation activities? implemented or is now implementing energy education activities? someone on staff responsible for K-12 energy education? 3. The Wyoming Governor's Office has: (information supplied by SEO) someone on staff responsible for K-12 energy education? No issued an executive order and/or statement regarding K-12 energy No committed funding to special K-12 energy education projects?

### Wyoming (continued)

- 4. Wyoming's Legislature has:
  - No a. enacted laws, passed resolutions and/or made recommendations covering K-12 energy education?
  - Yes b. a committee whose responsibilities include K-12 energy education?
  - No c. appropriated funds for K-12 energy education?

Table 12 is a state-by-state summary of responses to a questionnaire item designed to measure inobtrusively the degree of inter-agency communication within states. An agency's perception of other agencies' involvement or non-involvement in promoting K-12 energy education is indicated by an 'x'. Parentheses around an 'x' indicate whether the agency in question is promoting K-12 energy education itself, based on the best judgment of the analysts according to the specified set of criteria found in Appendix B of this report. To facilitate the reader's interpretation of Table 12, the following example is included.

Alabama: According to the criteria in Appendix B, Alabama's SEA is promoting K-12 energy education; however, its SEO, GO and SL are not.

Using the top row acronyms, it is found that Alabama's SEA falsely perceives involvement by its SEQ, but is unaware of involvement or non-involvement of its GO and SL.

Similarly, the SEO correctly perceives SEA involvement, but is unaware of involvement (or non-involvement) by its GO and SL.

Alabama's GO correctly perceives SEA involvement, falsely perceives SEO efforts and is unaware of SL involvement or non-involvement.

Finally, the SL correctly perceives SEA involvement, but is unaware of involvement (or non-involvement) of its SEO and GO.



Table 12. Inter-agency Communication

To the best of your knowledge, are the following agencies involved in Question: promoting K-12 energy education? (Note: ()'s indicate actual situations
as Judged by data analysts.)

State '	Agency		S			<del></del>		) -	ļ	ļ			• 22			SL	:
	`	Yes	No	D't	Know	Yes	No	D't k	now	Yes	No	D't	Know	Yes	No	Don'	/ Knc
	SEA	(x)		<u> </u>		×				x		- ;	•	х		J	
Alabama	SE0	x		æ		•	(x)			x							<b>x</b>
	GO			×				x			(x)						x
	SL			×				x					ĸ		(x)		
	SEA								3.5	x			<i>:</i>				
Alaska	SE0							•		x			· ·				
•	<b>G</b> 0						•			, ,	(x)						
	SL						_					, 2	c			·	•
	SEA	(x)				·x									x		
Arizona	SE0	x		,			(x)			-		•			x		
	<b>G</b> 0	x				x									x		
	SL	x			_		x						•		(x		
	SEA		(x)					x						x			
Arkansas	SE0	x	-		,		(x)		•						ŀ		x
	GO			. x				x				·					x ?
	SL			x	• (			x					·		(x)		
	SEA	(x)				x	,			· x		•		x			
California	SE0		Ì	x		(x)				x				x			
	<b>G</b> 0			x			x			(x)					-		x
	SL			x			x			x	•				(x)		. •
	SEA	4.	(x)				x				x				x		·
Colorado	SE0		·x			(x)				x						x	
	<b>G</b> 0			x		x				(x)					۷	х	
3	SL		x				x				x		, , ,		(x)		

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ()'s indicate actual situations as judged by data analysts.)

State	Agency		S	EA	1	SEO				GO			SL
		Yes	No	D't Know	Yes	No	D't Know	Yes	No	D't Know	Yes	No	Don't Kno
	SEA		(x)		х							, х	
Connecticut	SE0	x		,	(x)								, , , , , , , , , , , , , , , , , , ,
	60			×	x			-				x	
	SL			x	x	193				•		(x)	
	SEA	(x)				·		x					x
Delevare	SEO	x						ж				x	·.
-	GO	x					,	(x)					x
	SL	' X: ,					•	х				(x)	•
	SEA	-					_		-				
District of	SEO												
Columbia	GO			•	,	٤,	riski sanis		×.	4			`
	SL			233					*				
	SEA	(x)			x	-33		X					x
Florida	SEO	x			(x),							1.	x
	60	x			X.	2		(××)	a.				x
	SL	x			x	,	<b></b>	2		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		(x)	3
	SEA		(x)		x			x	-			1	. x
	SEO		x		(x)			x				+	x
Georgia	GO		x		x			(x)		-			x
	SL		x			x			x	4-74		(x)	
	SEA	(x)			x			x		•		+	•
	SEO	' x			(x)						X		
Hawaii	GO	x	1		×			(x)			X	1	
	SL	x	1		П	8	<u> </u>	x	T		#	(x)	x

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ()'s indicate actual situations as judged by data analysts.)

	1.	1		<del> </del>	η			ı	<u>.                                    </u>	· <del></del> -	ī		_	· · ·
State	Agency	4	. 1	EA	h——		)	 	· <del></del>	G0		٠.		SL
		Yes	No	D't Know	Yes	No	D't Know	Yes	No	D't Know-	Y	es	10	Don't Knov
	SEA	-	- 1	(x)			NR						x	
Louisiana	SE0	x												x
	GO			x			NR						x	
	SL			x			NR						x)	
	SEA	, 1	(x)		x		·	,	x		-			
Maine	SEO	x		· .	(x)		Cons	x						
ila ille	GO			x	x		1		(x)					
	SL			x		x			·x					
		(x)		•						· ·	+		=	
	SEA	x								• •	+			
Maryland	SEO	-	x	·							+			
	GO		x			-					+			
	SL					 					$\downarrow$			
	SEA	9	_	3				·					x	
Massachusetts	SEO	·				<u> </u>				·	1.		x	3
	GO			•		L.	1	1					x	
	SL	<u> </u>						45					(x)	
7.	SEA						x					x		
Michigan	SEO				(x	}	18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					x		•
MICHIGAN	GO						x			~· <b>·</b>	İ			x
	SL	1.		,			x					(x).		
	SEA	(x)	F		x			x						
Minnesota	SE0	×	-		(x	1		, x	3			<b>.</b>		
		<del>  -</del>	×		x		1	1 3				· · ·	1	
	60	x	1.		11	† T	<u>*</u> ,		(x		1.		*	
JC	SL_	<u>Ш^</u>	<u> </u>	<u> </u>	X		49	X			Ш			Later Space

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ()'s indicate actual situations

as judged by data analysts.)

State	Agency		S	EA	•	SE(	,		,	GO .	1		SL
0		Yes	No	D't Know	Yes	No	D't Know	Yes	No	D't Know	Yes	No	Don't Know
	SEA	(x)	,				x			•	х		
Idaho	SE0	x.		•	(x)		4 1		i	4	x		<u>.                                    </u>
	60		x		x					•			*
	SL		х				x				(x)		<u>.</u> .
	SEA	(x)							•		x		
Illinois	SE0	x		Ĩ					:		x		
	GO	×		*			-					x	
,	SL	x									(x)		
	SEA	(x)			×	.,	· .	x			x		•
Indiana	SEO	x			(x)	3	-	x			x		
*	GO	x					×	(x)				x	
	SL		x		÷	x			x		÷	(x	
	SEA	(x)									×		,
Iowa	· SEO	x									x		
	· GO	x		-			•			•			x
	SL	x	-								(x)		
	SEA		(x)		x				F		x		
Kansas	SEO	×			(x)			1		<b>†</b>	x		
, munaus	GO			x	x							1	x
	SL			х.	x						(x)		
	SEA				x			1			x		
V	SEO				(x	1.	•			1	x 3		
Kentucky	GO	11.			x	T			1	·			x
	1	11	+		1	+	<del> </del>	# -	$\dagger$		11	(x	<u> </u>

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ( ) s indicate actual situations as judged by data analysts.)

State	Agency		S	EA	٠.	SE	ن			:	G <b>0</b>	· ·		•	SL	. :
		Yes	No	D't Know	res	Ňó	D't	Know	Yes	No	D't	Know	Yes	No	Don't	Knov
	SEA	1.4			x	·				``			x			
Mississippi	SE0			•	(x)										x	
	GO				x	,		_							x	
	SL							x						(x)		
	SEA		(x)		x								x			7
Missouri	SE0	x.		•	(x)				,			<u> </u>	·x			
	GO	x			x							•			x	
	SL	х.			x								(x)		·	
,	SEA	(x)			x								x			
Montana	SE0			x	(x)		-			_			×		-	
	GO			×				x							×	
	SL			<b>X</b> :		x	1	•	•		>		(x)		-	
	SEA		(x)		x	-		*	x	·			x			•
Nebraska	SEO	x			, (x)	•			x				x			,
	GO ·	x				x		•		(x)			x			
_	SL			x	x				x			*		(x		
	SEA		•	6/2	x							•.		x		
New Jersey	SEO	·			(x)									×		
New Jersey	GO				X.			•		-				x		
	SL				1			x			1			(x	1	·
	SEA	(x)					-	NR.	x				x	-		
New Hampshire	SEO	x	•		(x	<b>k</b>			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				x	一:	-	•
	GO	x					-	NR.	(x)				x			
	SL		x		1			NR		×		<u> </u>		(x	1	

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ()'s indicate actual situations as judged by data analysts.)

<del>- 1</del>	E	<del></del> -		<del></del>			· • • •						7.				
State	'Agency		· S	EA		SE(	) "			<u>.</u>	GO.	•				SL	
		Yes	No	D't Know	Yes	No	D't	Know	Yes					Yes	No	Don't Kr	104
	SEA		(x)								x		$\prod$				
New Mexico	SE0	x			44.				x			•				_	
<b>*</b>	<b>60</b> -			x		1				(x)							
	SL			x				·	x					<b>c</b> .			
•	SEA			9					<del>-</del>			• •	#			1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	<b>y</b>
€.	15-	(x)	¥₹ · ₹	34	-	-						•	H	x		5,43	
New York	SE0	x	: # · ·		-						s.	· ·	$\!$	<u>x</u>		· · ·	•
*	GO	-	x		1	<u> </u>	<u> </u>	-	- i	<del>│</del> .		· · · · ·	#			ж	;
	· SL		x		-			2				·	$\prod$	_	(x)		-
	SEA	(x)			x		2.		2000				$\prod$	x		•	
Nevada	SEO	x			(x)								$\prod$	x	Γ		
AIC VOUS	GO			x	x					ودر			$\prod$	_		×	
	SL			x	x			Į.					$\parallel$		(x)		
													#				
	SEA				x	-	-		x				$\frac{1}{1}$		-	NR	
North Carolina	SEO				(x)	1		• !	x	$\vdash$	 		#	_		NR	
	_GO		1		x	-	, u		<u> </u>	(x)		\$-	$\perp$	· .	igspace	NR.	
,,,	SL				x			- Harriston		_	2.35.	x	$\prod$		(x		
22.	SEA		(x)		x					1				×			J.
	SEO	x			(x)								$\parallel$	×			_
North Dakota	GO	₩-		x	x				1		T			x	1		
				x '	-	×		•	-				+		(x		٠.
	SL				#	+			-	N.	1	·,	-			1	
	SEA	(x)	+			1		· · · ·	x	**	3 <b>Q</b>	4	"   •	10 10 10 10 10 10 10 10 10 10 10 10 10 1	1.		
Ohio	SEO -	x			1	-	-		x_	13		<u> </u>	1	. , -	$\perp$	1	•
	GQ-			x		•	•	• •		(x	<u>)</u>				<u> </u> .	•	
•		1	1.3	×	11	. ] .		•				x	· 1		`   - <sup>-</sup>		•

Question:

Table 12. Inter-agency Communication (continued)

To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ()'s indicate actual situations as judged by data analysts.)

State	Agency		S	EA.	•	SE(	)				GO			•.	. SL	
		Yes	Ņο	D't Know	Yes	No	D't	Know	Yes	No	D't	Know	Yes	No	Don't	Kriov
	SEA	(x)			x			•	ж				. x			
Oklahoma	SEO	x		œ-	(x)				x		<u>.</u>		x		,	1,
	). GO	x			x				(x)			•		x		
	SĹ		ж		x				1	x	•			(z)		
	SEA		,						х.	, ,		ارتدا مدیوه و براند			x	
Oregon	SE0								x					·	×	
	GO	,							130	(x)					x	
	SL	: :					•		x			• 3.	1	(x)		
	⊴,SEA															
	3 3	(x)	*	<u> </u>	-								×		· · · ·	
Pennsylvania	SEO	x	•			7.5	-		-	_			x		4.	
	GO SI	;- <b>X</b>		•					-					- 3	<b>c</b> * `	
	SL			x				-				· ·	(x)	+		
	SEA	(x)_	•	· · ·			•	<b>-</b>				· _	-	1		
Puerto Rico	SE0	x				-	•	1		_		<u> </u>	-	<del> </del>	, , , ,	
	GO	x				-					c	-	₩-	_		
	SL	x					:	-				·				-
	SEA	(x)											×			
Rhode Island	SEO	x						27.5 27.5							x	
	GO_	x		•			.						x	*		•
	SL	x.			<b> </b>  ;		13 :						(x	)		
	SEA	(x)	.,					×	x				x			:•
Carry Carry	SE0	x				(x)			·x				x			,
South Carolina	GO	1		×	x	1		* 1	*	121		- / - / - /	×			•
	SL		x					<b>x</b> .	-	(x)	/ 32			(×		

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ()'s indicate actual situations as judged by data analysts.)

State	Agency		S	EA		SEC	) -4		••, -	GO .	1.	,	ŠL	
		Yes	No	D't Know	<b>re</b> s	No	D't Know	Yes	No	D't Know	Yes		Don't I	Knc
	SEA	(x):			x		43	•		•	х			
South Dakota	SE0	x.			(x)	,	*	•		,	×		i .	
	GO		х		x			,					x	•
	SL		x			x	• •			τ		(x)		į.
	SEA				×	-		ж						•
Tennessee	SEO				(x)	,		x		•				
remessee	.GO:						x		(x)					. 0
	SL						x		x	•		· ·		. `
	SEA	(x)					<b>.</b>					x		
Texas	SEO		. , .	x							,	x		•
	GO	x										x		•••
	SL	•	*	X								(x)		•
	SEA	(x)			x			x			*	•		
Utahr	SEO	x			(x)		23.0	x			x		,	
	GO	ж			x			(x)			1	x		
	SL	x	7.			c	×			x		(2		
	SEA	(x)				1			.,	• 11.	2	. 17	٥	:
Vermont	SEO	x								. 6. 7.	,			
	GO	x									<del> </del>			;
	SL	-:::			140		и			A		(2		
	SEA	(x)	1		·			x					×	
Virginia	SEO	x ·			(x)		9	x			,	e		
1101111	GO	x			x				(x				x	
	SL	x					P. X	1		x		(2		•

Table 12. Inter-agency Communication (continued)

Question: To the best of your knowledge, are the following agencies involved in promoting K-12 energy education? (Note: ( ) s indicate actual situations
as judged by data analysts.)

	<u> </u>	<del>                                     </del>	•		Ţ.	<i>;</i> ::		·	· ·	· · · · · · · · · · · · · · · · · · ·	·.		
State	Agency			SEA		?F(	) ————			GO			SL
•••		Yes,	No	D't Know	Yes	No	D't Know	Yes	No	D't Know	Yes	No	Don't Kno
,	SEA		'(x)							•			
Samoa	SE0	2	X	7 0									$\sim$
	GO		x					.,					
·	SL		x.				-				. ~		2
	SEA	( <del>x</del> )						x			x		
Machineka	SEO	x						x					
Washington	G0		x					1	(x).		X	x	
			x				-	-		x			<u>.</u> 6 .
	SL									*		(x)	
· ;	SEA		Š.	NR	. x	-		V	,				x
West Virginia	_ SEO			NR		(x)					x	-	
	GO, -			NR			ж		_				x
	SL			NR		1,5	x			_		(x)	•
	SEA	(x)	7,0		x			x		·	x		- >
Wisconsin &	SE0	x			(x)			x			x		
	GO		x				x		(x)	-		·	x
	SL		x				ж	1,-	x			(x)	
					•	-						1	
	SEA	(x)	-	3	x		,	x			x		
Wyoming	SEO	x		0	(x)		7	х	-		x	1 :	
	GO		x		,				(x)			×	
· ·	SL		x	7.5	 	x	-		x			(x	
	SEA			11.7									`
	SE0		-			-		•-		, ,		-14	
	GO						•			,			ļ ·
3	SL												5 S
OS DY ERIC	<u> </u>			·	•	5	5.		•			- ,	

disc of Table 12 made possible a determination of responding agencies actual involvement or non-involvement in promoting K-12 energy education. Table 13 tabulates this information.

Table 13. Actual Involvement or Non-Involvement of Agencies in Promoting K-12 Energy Education, Per Cent of All States

	Agency	nvolved	Not Involved	Unknown	Total
	S <b>EA</b>	30 (57.7%)	13 (25.0%)	9 -(17.3%)	52 (100%)
	ŞE0	(29 (55.8%)	6 (11.5%)	17 (32.7%)	52 (100%)
	GO	9 (17.3%)	16 (30.8%)	27 (51.9%)	- 52 (100%)
·	SL	· 8 (15.4%)	35 (67.3%)	9 (17.3%)	52 (100%)

Other data indicate that of the 28 states which returned <u>both</u> the SEA and the SEO questionnaires, seventeen (61%) exhibited active involvement of both their SEA's and SEO's. Thus, when one couples this data with data involving inter-agency communication (Table 12) and actual involvement (Table 13), one might infer that roughly one-third of all states have SEA's and SEO's which are actively <u>cooperating</u> in one or more aspects of K-12 energy education.

### IV. Conclusions/Implications of Findings

In the discussion which follows, conclusions of the study are underscored and their implications are offered below each.

There appears to be a major lack of communication and cooperation among agencies within a given state. This has lead to considerable duplication of effort in the promotion of K-12 energy education activities and, worse, as the data indicate, some agencies have assumed falsely that other agencies in their states are involved in the education effort. Glearly, much can be gained by closer intra- and inter-state

communication and cooperation among agencies involved in K-12 EE.

- 2. The greatest amount of K-12 EE communication occurs between SEA's and SEO's, and SEA's/SEO's are more aware of each other's energy education efforts than of other agencies' efforts. An implication is that, when given states' SEA's and SEO's are both actively involved in K-12 energy education and communicating, a greater effort can result. On the other hand, a lack of communication with SL's and GO's implies that the latter may remain unconvinced of the importance of the K-12 EE effort. Without such knowledge, it is doubtful that appropriations will be made at the state level.
- 3. <u>Most of the responsibilities for K-12 energy education are being assumed by SEA's and/or SEO's, with slightly more SEA than SEO involvement.</u> State legislatures and GO's have provided little input, financial or otherwise, into the K-12 energy education effort. Their active involvement should be encouraged to provide a broad base of state support.
- 4. Most states' K-12 energy education programs are being funded through the SEO's with federal dollars. Unless federal allocations continue, many states' K-12 energy education programs will be in danger in 1980, given the present system of funding.
- 5. <u>In many states the SEO's exist as part of the governor's cabinet</u>. Because of administrative changes which may occur during election years, SEO staffing may change, thus resulting in a loss of continuity and efficiency in the K-12 energy education effort.
- 6. Most K-12 energy education programs reviewed, both nationally and locally developed, have been designed for integration into existing curricula,



and are similar in that they offer general treatments of energy education.

Easily integrable modules and units provide educators with a "painless" way to incorporate energy concepts into their existing programs. While locally developed programs impart a sense of "ownership" to their developers, so many general treatments of energy education represent a great duplication of effort. Further, failing to deal with the unique energy problems associated with their own states, many local programs can only partially meet the needs of their students and citizens.

- Most programs submitted for review are geared to science and social studies classes. Since energy perwades all facets of society, the true scope and importance of energy and energy conservation cannot/be realized fully by all students until energy education pervades all disciplines.
- 8. There appear to be no significant grade level gaps in materials produced for national and local distribution. Those educators interested in developing a comprehensive K-12 energy education program can locate general materials appropriate for given grade levels without great difficulty.



# APPENDIX A





## Education Commission of the States

300 Lincoln Tower • 1860 Lincoln Street (303) 893-5200 • Denver, Colorado 80295

May 12, 1978

### Dear Respondent:

The subject of energy education has attracted considerable attention in recent years, resulting in the development of a variety of policies and programs affecting our nation's schools. In a continuing effort to fulfill the ECS compact mandate to "provide a clearinghouse of information" for state level policy makers and others involved in education and to assist the states in their leadership efforts, ECS is collecting information from the states concerning existing and proposed policies, legislation, and programs related to energy education.

Our state energy education policy project has been funded through a grant from the U.S. Department of Energy. The project has three phases: First, information from the states will be compiled and analyzed. Second, project staff will work with a national advisory group to develop alternative energy education policies designed to meet the state needs. Third, the information gathered from the states and the model policies written by the staff and advisory group will be disseminated nationwide: Separate questionnaires are being sent to state education agencies, state legislatures, governors' offices, and state energy offices.

We would appreciate your or someone on your staff completing the enclosed questionnaire at your earliest convenience. Please do not reroute it to another agency. A postage-paid envelope has been enclosed with this letter for your office's response. Questions about survey items or about the state energy education project should be directed to Edith Petrock, Assistant Director for Program Development, Elementary/Secondary Education Department, Education Commission of the States, (303) 861-4917. If possible, we would like your response by Friday, June 2, 1978. Of course, you will be supplied with a copy of the final report. Thank you for your assistance.

Sincerely,

Edith Mr. Petrock

Edith Petrock
Assistant Director for Program Development
Elementary/Secondary Education

EP/lev

MAY, 1978		ENERGY EDUC	ATION SURVE	Y		·.
Prease answer the cach additional		questions.	Should you	need more	space, p	lease
NAME OF RESPONDENT	•			•		
TITLE:				<u> </u>	<u> </u>	
ADDRESS:		<u>-                                    </u>	· 	• *	·	
CITY:STA	ΓE:	ZIP:	P	HONE : (	)	
1. Who (if anyone ities for K-12	energy ed	ucation?	1			
TITLE: Number of s		•	ł			
ADDRESS: Unknown: 9	•		(Please refe	r to Appendio	A-12 - A	-15)
	·	·				
PHONE: ( )	· · ·	1	( )			* * * * * * * * * * * * * * * * * * * *
Yes No No lf yes, pleas numbers below	Yes: l( e list con	25%) No: tact person	3 (75%) s, agencies	• •		
NAME: (Please re	fer to Appen	dix A-16, A-1	7)		<del>-                                    </del>	
TITLE:	· · · · · · · · · · · · · · · · · · ·				7	
AGENCY:		• •	· .			
ADDRESS:						
PHONE: ( )  2. Has the SEA is regarding K-12					or guide	ines
YesNo	Yes: 19 (	(36.5%) No	: 23 (44.2%)	Unknown:	10 (19.3%	)
If yes, please required or op	summarize tional:	below and/	or attach t	exts, indi	ating wh	lether
(Please	efer to Appe	endix A-17, A-	18)		•	* *
		<del></del>			112	-6 · 9



infusion of K-1	2 <u>energy educ</u>	<u>cation</u> as: (	check all a	ppropriate	) A-3 SEA - Page
		At which	levels? <u>EL</u>	EMENTARY	SECONDARY
16 permitted in		•		_16_	16
3 mandatory in		nodules?	•	2	16 2 7
1 required cou		•		<u>3</u>	7
22 no rules or		ns		<del></del> ·	<u></u> -
	•				
Has the SEA com since 1973?	<u>pleted</u> any re	esearch work	regarding K	-12 <u>energy</u>	educatio
Yes No Y	es: 10 (19.2%)	) No: 30 (57	.7%) Unknown	: 12 (23.19	<b>%</b> )
(a) If so, plea	se summarize	such activit	iescand fin	dinas, inc	ludina
names, addresse					
the research:	•	<u> </u>		<u> </u>	*
		•	4.		•
<u> </u>				<u> </u>	
(Please refer	to Appendix A-1	18, A-19)			<u> </u>
	•				•
			,		Section 1
(5) If the SEA	<u>currently is</u>	conducting r	esearch in	K-12 energ	<u>v educati</u>
			•		
Currently	conducting resea	arch: 9 (17	.3%)		
Not curren	tly conducting r	research: 32 (61	.5%).	·	
Unknown:		11 (21	.2%)	******	المراز المعادة
In addition to					
received special projects?	r tancing mo	r otner kinds	5 OT K-12 en	ergy educa	תפוד.
				. •	
YesNo	Yes: 12 (23.1	1%) No. 30 (	57.7%) Unkno	own: 10 (19	. 2%)
(a) If so, plea	sa describe	nature of pro	niect inclu	ding names	address
and phone number					
A STATE OF THE STA					
(Please ref	er to Appendix /	A-19 - A-20)			
				• • • • •	
			<del></del>	· · ·	
			•		
				• .	· ·•
(b) Are any sor energy education		** \$ **	ate presenti	A FUNCTINE	n exem:
)		· '•'	(38.5%) No:	18 (34.6%)	
Cles to in	yes, nowing	e / ? Ur	nknown: 14 (26		
		62			the state of the s

5.	(C				
<b>—</b>	11	∩ m	+ .	4	
<b>.</b>		$\mathbf{u}$	_	u.	

If yes, please list the three most successful programs and the districts involved including names, addresses and telephone numbers for those persons implementing the programs:

	PROGRAM		(Plea	ase <u>re</u> fer	to Appe	ndix A-2	1 <i>-∴</i> ∦-24	)	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		ta.	<u>.</u>
				Tyles of			•				V.	, ,
				Harris Land	•			_			1	
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\$.	PROGRAM	#2:					. B					
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::	PROGRAM	#3:	4	·•.	•	•					·	· •
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			*:					r ja				, ,
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. •	Yes If yes, and bri	pleas	res: i se enclos scription	8 (34.6% e a cop of the	y. (I	this		•			give t	i t l
:	<u></u>			•		7. 9	• • • • • • • • • • • • • • • • • • •					
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`	(d) Is related	curr	EA using icular ma	terials	;? (P1∈	ea ș e exch	eçk all	appro	he fol priate	lowii e)	<b>n</b> g ener	3 <b>y</b>
			(23. <u>1%)</u> En								· · · · · · · · · · · · · · · · · · ·	
•			(26. <u>9%)</u> Pr		ě.			ed Curr	riculun	n (PE) -	EC)	
	•	8	(15. <u>4%)</u> En	ergy &	Societ	y #BSCS	)	(i) -	.:		<b>*</b>	
	• •		. —	her							·	:
•	• .	3	/ F OO/ \ \ \ \ \ \			<i>-</i>	Please	specif	v )			
: •		1	(5.8%) Loc (1.9%) "Er (32.7%) No	nergy & O	ve loped		Please er cent	•				

5. (cont'd)

(e)	Please	list other	materials	developed	b y	the	\$EA	concerning	K-12
	·eaergy	education	(other than	ı c)				, -	

Number of SEA's having ideveloped "other materials": 13 (25%)

Number of SEA's having developed no "other materials": 30 (57.5%).

Unknown:

9 (17.3%)

(Prease refer to Appendix A-26)

5. What teacher inservice activities for K-12 energy education (if any) has the SEA provided? Please describe (or attach copies of programs/brochures etc.)

Number of SEA's providing inservices: 22 (42.3%)

Number of SEA's providing no inservices: 19 (36.5%)

Unknown: (21\_2%)

(Please refer to Appendix A-27 - A-28)

To the best of your knowledge, are the following agencies involved in promoting K-12 energy education?

state legislature:

'Yes<u>13 No.15 Don't know</u>15

Governor's office:

Yes 19 No 10 Don't know 14

state office of energy:

Yes 30 No 3 Don't Know 3

other state agencies

\_10

(Please refer to p. 8)

(Please specify.)

Additional comments describing SEA's involvement in K-12 energy education:

(Please refer to Appendix A-28 - A-32)

MAY 1978	ENERGY EDUCA	TION SURVEY		<u> </u>
Pi ase answer the following at ach additional sheets or	questions. Si use the revers	nould you need se side of the	more space, last page.	pīease
NAME OF RESPONDENT:	<u> </u>		·	
TITLE:		<u> </u>		
ADDRESS:	<u></u>	6. 1 8. 4. 1		A - 6''
CITY:	_STATE:	ZIP:	PHONE: (	)
I. Was some form of kinder incorporated or include PLAN?  Yes (Please complete  No (Please skip to  (a) If yes, is the K-12  Yes No Yes: 20  (b) Has it been amended  Yes No Yes: 5	d in your stat  Question 1)  Question 2)  education sec  (95.2%)  ?  (23.8%)	e's original E  Yes: 21 (40.4%  No: 14 (26.9%  tion being imp  No: 1 (4.8%)  No: 16 (76.2%)	NERGY CONSER ) Unknown: )	17 (32.7%)
2. If K-12 energy education CONSERVATION PLAN, do y through your office?  YesNo Yes: 8  If yes, please describe  (Please refer to A	ou now have an (57.1%) and/or enclos	education pro No: 6 (42.9%) se text:	ogram being	ENERGY implemented
(If not, please skip to	Question ==	,	2	

# State Energy Office - Page 2

3 Is your office's the olvement in K-12	energy education funded by:
(Please check appropria	te responses).
15 (28.8%) Energy Policy and Conse 23 (44.2%) Energy Conservation and 3 (5.8%) Energy Extension Service 3 (5.8%) State grant 5 (9.6%) Other (Please specify) No funding secretary 17 (32.7%) DAM/t/Magn/Unknown	e (EES)
4. Please list members of your staff who energy education (include titles, add	have responsibilities for K-12 resses, and telephone numbers).
NAME: Number of states having at least one staf	f person: 26 (50%)
TITLE: Number of states having no staff person:	3 (5.8%)
ADDRESS: Unknown:	23 (44.2%)
(Please refer to Appendix A-34 - A-37)	
PHONE: ( )-	( )
.5 To the best of your knowledge, are the moting energy education?  state legislature:	Yes <u>ll No9</u> Don't know <u>17</u>
governor's office:	Yes 23 No 1 Don't-know 11
state education agency: other state agencies: (Please refer to p. 11) (please specify)	Yes <u>28 Nol Don't know 6</u>
6. Additional comments describing your ceducation:	office's involvement in K-12 <u>energy</u>
(Please refer to Appendix A-37 - A-4	0)
<b>\$</b>	

ري حريان	Legislature - Page 1 A-8
MAY,	1978 ENERGY EDUCATION SURVEY
P a a ca	se answer the following questions. Should you need more space, please ch additional sheets or use the reverse side of the last page.
NAME	OF RESPONDENT:
TITL	. <b>E:</b>
ADDR	RESS:
CITY	
• .	Has the legislature enacted any laws, passed any resolutions or made any recommendations regarding kindergarten through 12th grade (K-T2) energy education in the state's schools?
	Yes No Yes: 7 (13.5%) No: 36 (69.2%) Unknown: 9 (17.3%)
	If yes, please describe briefly and/or attach appropriate text(s), including citation(s).
	(Please refer to Appendix A-41)
2.	Is there a legislative committee(s) whose responsibilities include K-12 energy education?
	Yes No Yes: 19 (36.5%) No: 24 (46.2%) Unknown: 9 .(17.3%)
	If yes, please list name(s) of committee(s) and chairperson(s) below.
• .	COMMITTEE CHAIRPERSON
•	
•	(Please refer to Appendix A-41 - A-43)
·	
3:	Has the legislature appropriated any money-for K-12 energy education sinc FY 1973?
	YesNoYes: 1 (1.9%) No: 42 (80.8%) Unknown: 9 (17.3%).
	If yes, approximately how much during 1977? \$60,000

Legislature - Page 2 A-9

ENERGY	EDUC	ATION.	SURVEY
--------	------	--------	--------

3. (cont'd)
(Please refer to Appendix A-43)  It yes, for which years? (Please check) 1973 1975 x 1977  ——————————————————————————————————
4. Since FY 1973, has the legislature mandated any K-12 energy education studies or research?
Yes No Yes: 0 (0.0%) No: 43 (82.7%) Unknown: 9 (17.3%)
(a) If yes, please summarize nature of the research and findings: including the name, address and telephone for persons and/or agencies conducting the research.
(b) If research was done, which agency or agencies conducted it?
AGENCY ADDRESS TELEPHONE
ADDRESS &
5. To the best of your knowledge, are the following agencies involved in promoting K-12 energy education?
state education agency: Yés 20 No 7 Don't Know 7
governor'\s office: Yes 7 No 13 Don't Know 23
(Please refer to p. 12)
(Please Specific
6. Additional comments describing legislature s involvement in K-12 energy equipment in K-12 energy
(Please refer to Appendix A-43 - A-45)

, • ·	ENERGY EDUCATION SURVEY
•	(contid.)
	Please describe the nature of involvement, if any:
	(Please refer to Appendix A-48, A-49)
_	
_	
•	
_	
<del>. ,</del>	
,	promoting K-12 <u>energy education?</u> *State legislature: Yes X: Noll Don't know 7.
	state education agency: Yes 21 No 3 Don't know 1
	state office of energy: Yes 24 🕬 o 1 Don't know 0
	other state agencies: 4 (Please refer to p. 14 and Appendix A-49)
	(Please refer to p. 14 and Appendix A-49)  (Please specifiy)
	Additional comments describing your office's involvement in K-12 energy
•	education:
4-	(Please refer to Appendix A-50, A-51)
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t	
	· · · · · · · · · · · · · · · · · · ·
•	



### Responses to Open-Ended Items

### <u>S.E.A.</u>s

- Item 1 Who (if anyone) in the state education agency (SEA) has the responsibili-
  - (Alabama) Donna Bentley, Energy Education Specialist
    Alabama State Dept. of Ed.
    111 Coliseum Blvd.
    Montgomery, Ala. 36117 (205) 832-5850
  - (American Samoa) Matt T. Lei, Secondary Science Specialist Science - D.I.D., Dept. of Education Utulei, American Samoa 96779 633-1246
  - (Arizona) Tillman E. Turley, Education Program Specialist 1535 W. Jefferson Phoenix, Arizona 85208 (602) 271-4888
  - (California) Rudolph Schafer, Environmental-Energy Education Program Director Calif. Dept. of Education
    721 Capitol Mall
    Sacramento, Calif. 95814 (916) 322-4018
  - (Colorado) No one responsible The General Assembly did not fund the position.
  - (Connecticut) Dr. Sigmund Abeke, Science Consultant State Dept. of Ed. 17 Hartford, CT 06115 (203) 566-4825
  - (Delaware) Dr. Douglas R. Macbeth, State Supervisor Science/Environmental Educ.
    Dept. of Public Instruction
    P.O. Box 1402
    Dover, Delaware 19909 (302) 678-4885
- Florida) C. Richard Tillis, Director, Office of Environmental Education 305 Winchester Building Tadlahassee, Florida 32304 (904) 488-6547
  - (Georgia) Mr. Douglas Stewart, Science Coordinator GA Dept. of Education Atlanta, GA 30334 (-404) 656-2576
  - (Hawaii) Elaine Takenaka, Judith Pool, Miles Muraoka
    All program specialists; social studies, environmental education, and science, respectively.
    1270 Queen Emma Street, Rm. 1102
    Honolulu, Hawaii (808) 548-5959
  - (Idaho) Karen Underwood, Consultant, Equironmental Education State Dept. of Education, LBJ Bldg. Boise, Idaho 83720 (208) 384-2113



### Item 1 - continued

(Illinois) Donald T. Anderson, Jr., Energy Specialist
Illinois Office of Education - 100 North First Street
Springfield, Illinois 62777 (217) 782-2962

(Indiana) Joe Wright, Environmental Education Consultant Division of Curriculum, Rm. 229, State House Indianapolis, Indiana 46204 (317) 633-4576.

(Iowa) Duane Tooman, Environmental Education Consultant (515) 281-2146 Jack Gerohwich, Science Consultant (") 281-3249 Curriculum Division, Iowa Dept. of Public Instruction, Grimes Bldg. Des Moines, Iowa 50319 (515) 281-3146

(Kansas) Charles E. Nicholson, Coordinator, Educational Assistance Section 120 E. 10th
Topeka, Kansas 66612 (913) 296-3851

(Louisiana) Honorable J. Kelly Nix, State Superintendent, Department of Ed.
Post Office Box 44064
Baten Rouge, Louisiana 70804 (504) 389-2553

Don McGehee Science Supervisor P.O. Box 44064 Baton Rouge, Louisiana 70808 (504) 342-3420

(Maryland)
Dr. James Whatham Jr.
Chief, Curriculum Branch
Box 8717
Baltimore, MD 21240 (301) 796-8300

(Minnesota) Richard C: Clark, Science Consultant

Minnesota State Dept. of Education, Capitol Square Bldg. St. Paul, Minn. 55101 (612) 296-4071

(Missouri) Dr. Richard King, Coordinator of Curriculum
P.O. Box 480
Jefferson City, MO 65102 (314) 751-2625

(Montana) Edward Eschler, Social Science & Environmental Education
Consultant
Office of Public Instruction
Hélena, Montana 59601 (406) 449-2543

Gary Hall, Math & Science Consultant Same as above

(Nebraska)

Don Woodburn, Science Consultant - Neb. Dept. of Education P.O. Box94987; 301 Centennial Mall So. Lincoln, Neb. 68509 (402) 471-2446

Item 1 - continued

(Nevada)

Jack O'Leary
Education Consultant
Nevada Dept. of Education
Capitol Complex, Carson City, Nev.
(702) 885-5700 89710

James H. Menath
Assistant Director
Nevada Dept. of Education
Capitol Complex, Carson City, NV 89710

(New Hampshire)

Robert Holt Consultant, Trade and Industry Dept. of Education Div. of Voc-Tech. Ed. 105 Loudon Rd. Concord, NH 03301 (603) 271-3587

(New Mexico)

B.K. Graham, Science & Conservation Specialist N.M. State Dept. of Education, State Education Bldg. Santa Fe, N.M. 87503 (505) 827-5391

(New York)

Barry W. Jamason Coordinator, Environmental Education Room 314G New York State Education Dept. Albany, New York 12234 (518) 474-5890

Edward Lalor (Solar Energy Ed. Project)
Chief, Bureau of Science Education
New York State Education Dept.
Albany, New York 12234 (518) 474-7746

(Oh i

Dr. John Hug, Coordinator, Environmental and Energy Education 65 S. Front St., Room 802 Columbus, OH 43125 (614) 466-5015

(Oklandoma)

Larry McKinney & Howard Potts, Science Specialists 2500 N. Lincoln, State Dept. of Education Oklahoma City, OK 73105 (405) 521-3361

Bob Martin, Adm. Fiscal Plant Services State Dept. Educ., 2500 N. Lincoln Oklahoma City, OK (405) 521-3812

(Pennsylvania)

John J. McDermott, Senior Advisor, Science Penn. Dept. of Education (Box 911 > Harrisburg, Penn. 17126 (717) 787-7320

Item 1 - continued

(Puerto Rico) Frederick E. Rushford, Federal Programs Officer

Office of Federal Affairs, Office of the Governor, La Fortaleza

San Juan, PR 00901 (809) 724-7900

(South Carolina) Alice Linder, Environmental Education Consultant

803 Rutledge Building

.Columbia, SC 29201 (803) 758-2652

(South Dakota) Dan Elwood, Div. Science and Environmental Ed.

State Office #3

Pierre, S.D. (605) 773-3655

(Texas) Ira Neill Turman, Consultant

Texas Education Agency 11th & Brazos (512) 475-3868 Austin, Texas 78701

(Utah) Richard S. Peterson, Science Specialist

Utah State Board of Education

250 E. Fifth South St.

Salt Lake City, Utah 84111 (801) 533-5061

George Tanner, Program Coordinator: Science, Energy and Environmental (Vermont)

Education, Dept. of Education

120 State St.

Montpelier, Vermont 05702 (802) 828-3111

Virginia)(2) Dillard Haley

Dr. Edwin White

Supervisor of Science Education P.O. Box 6Q, 1322 E. Grove St.

Richmond, VA 23216 (804) 786-2676

Mr. Franklin D. Kiza

Supervisor of Science Education

P.O. Box 60

Richmond, VA 23216 (804) 786-2672

David Kennedy, Supervisor: Environmental Ed., OSPI (Washington)

Tony Angell, Supervisor: Environmental Ed., OSPI

Old Capitol Bldg.

Olympia, Wash. 98504 (206) 753-2574

(Wisconsin) David C. Engleson, Environmental Education Supervisor

Dr. Kenneth Dowling

Dept. of Public Instruction

126 Langdon St.

Madison, Wisc. 53702 (608) 266-3319

Dr. Bill Futrell, Science/Math Consultant (Wyoming)

Wyoming State Dept. of Education

Hathaway Building; Cheyenne, Wyo.

(307) 777-744 1/6

Item la) if no one, are other state agencies responsible for K-12 energy

.1b) If yes, please list contact persons, agencies, addresses and telephone numbers below:

(American Samoa) John Tuitele, Elem. Science Specialist Dept. of Education Science - D.I.D., D.O.E. Utulei, American Samoa 96799 633-1

Greg Sharp, Director of Education

Dept. of Env. Protection Hartford, Conn. 06115 (203) 566-3489

Dr. Claire Markham, Undersecretary for Energy Office of Policy and Management

20 Grand St. Hartford, Conn. 06115 (203) 566-2800

thy Prokett, Education Program Director Office of Energy

Statehouse, Boise, Idaho 837 (208) 384-355

Henrietta Lindberg, Conservation Director Energy Policy Gouncil 15 E. 7th es Moines, Iowa 50319 (515) 281-4308 (Iowa)

(Kansas) Steven Harris, Directo State Energy Office

🦸 503 Kansas Ave.

Popeka, Kansas 66

Louisiana Dept. of Name Resources

Susanne Holling h, Education Consultant
MN Energy Agent,
T60 F Kellong (Minnesota)

160 E. Kellogg, St. St. Paul, Minn. \$6101

(612) 296-8492

Gary Lay, Energy Education Coordinator (Nebraska)

NE State Snergy Office

4th Floor State Office Building; 301 Centennial Mall S.

Lincoln, **@**b. 68509 (402) 471-2867

(North Dakota)

Clay Dunla Office of hergy Management and Conservation 1533 N. 12th St.

Bismarck, N.D. 58505

Item 1b & continued

(Oklahoma) Dr. Steve Marks, Energy Ed. Specialist

Okla. State University Poultry Sci. Bldg. Stillerter, OK 74074

(Texas) Governor's office of energy resources

(Virginia) 2 & Ethy B. Erickson, Virginia Energy Office 23 E. Main St., Richmond, VA 23219 (804) 786-8451

S.E.A.s

Item 2 - Has the say ssued any policies, rules, recommendations or guidelines regarding K-12 energy education in school districts?

If yes, please summarize below and/or attach texts, indicating whether required an aptional.

(Arizada) Attached

(Candana Enclosed

(Floreda) The Environmental Education Act 1975 provides staff, funds, and powers to teach conservation of all natural resources.

Attached.

Mawaii) In process of formulation

(in case of energy supply curtailment, a recommended plan was issued to LEA's.

(Illimois) Attached

(Indiana) We have just received a grant to design a K-6 interdisciplinary energy ed. curriculum. Attached.

(Iowa) Energy Conservation Activities packets K-6 (ECAP's) \$10/ from EPC. 2,000 elementary teachers inserviced this year. Energy Savings in School Buildings (seminars for administrators).

(Minnesota) We have developed some literacy statements that will be used as the basis for developing curriculum materials, grades K-12. We have also put together a bibliography of available curriculum materials. Attached.

(Montana) Provide school services in response to office goals and Montana House Joint Resolution 75 concerning energy education. Attached.



Item 2 - continued

(Nevada) State Board issued a position statement in February, 1976 (attached).

(New Hampshire) In August 1975, the State Board of Education designated Energy Education as one of the 4 or 5 top priorities for education in New Hampshire.

They have recently reaffirmed this designation. In addition, early in 1974, the Department prepared a Policy Statement relative to energy education which recommends that schools develop K-12 programs which incorporate energy education into the existing curriculum.

(Ohio) One of the major missions of the Department's Energy Assistance Office is to encourage and promote energy conservation education in Ohio school districts. Attached.

(Oklahoma) Optional - Energy Education Instructional Activities - Background + K-12 Attached

(Pennsylvania) Optional - but we make curriculum guides available: Attached.

(Puerto Rico) .The Curriculum Design Unit has developed short courses, course modules, and guidelines for teachers which will be forwarded under separate cover in order to meet the June 2, 1978 deadline.

(Rhode Island) Energy Resource Guide (see attached) as optional material.

(South Carolina) Infusion of energy education has been recommended and a sampling of activities has been collected and printed for teachers to use with individuals, small groups or large classes. A copy of this document is attached.

(Utah) Using Energy and Man's Environment curriculum materials and training aids.

(Washington) Optional - draft framework for Energy/Energy Conservation Education.
(Under Revision) Attached.

(Wyoming) State Board of Education (1977) passed a general policy encouraging district to engage in energy audits and energy education programs. Attached.

#### <u>S.E.A.s</u>

Item 4 - Has the SEA completed any research work regarding K-12 energy education since 1973?

- a) If so, please summarize such activities and findings, including names, addresses and phone numbers for persons and agencies conducting the research.
- b) If the SEA <u>currently is conducting</u> research in K-12 <u>energy education</u> please describe briefly, including names, addresses and phone numbers of those conducting the research:

(California) Periodic review and evaluation of materials as they become available.



# <u>S.E.A.'s</u> (continued)

Item 4 - continued

(Florida) a) Office of Env. Ed., State Energy Office b) A statewide need assessment and materials and plans to fill those needs. This is in the areas of education and energy management.

(Hawaii) Utilizing findings of: State Energy Office
Department of Planning & Economic Development
State of Hawaii
Honolulu, Hawaii 96813

(Iowa) Surveyed Industrial Arts, Home Econ., science and social studies secondary teachers to determine materials available and needed. Names and address in #1. Inservicing of ECAP's. 4b) -tabulation of secondary survey is now in progress.

(Minnesota) A K-12 Needs Assessment. N-3, 700 teachers. MN Dept. of ED. Bibliography of available curric. materials. MN Energy Agency. Names and phone numbers are already listed on previous page. 4b) Project finished.

(Montana) See attached p.4

(Pennsylvania) Curricular materials developed by us. 4b) K-12 curriculum John J. McDermott, Senior Advisor, Science, Penn. Dept. of Education, Box 911, Harrisburg, PA 17126 (717) 787-7320

(Puerto Rico) Was not able to obtain information because of limited time a-vailable.

(South Carolina) As part of a survey of teachers - what they thought should be taught and to what extent it is taught.

(South Dakota) Dan Elwood (605) 773-3655

(Texas) Research is in progress 4b). Same as listed on page 1.

(Washington) Richard Barnhart - <u>Bibliofile</u> - a bibliographic compilation (annutated) of energy/environmental resources - people, plans, programs and things.

(Wyoming) 4a) Developmental Research - SDE and Science/Math Center of U. of Wyoming developed energy program. 4b) Doing evaluation of existing programs.

# S.E.A.s

Item 5 - In addition to research discribed in Question #4 above, has the SEA received special funding for other kinds of K-12 energy education projects?

5a) If so, please describe nature of project, including names, addresses and phone numbers for persons and agencies implementing the project.

(Alabama) Cooperative project with AL Energy Management Bd. to develop curriculum material. Mr. Edwin Hudspeth, AL Energy Management Bd. Montgomery, AL 36109 (Phone) (205) 832-5010



Item 5 - continued

(Hawaii) Title IV, Part C. Project; as proposed, will plan K-12 energy educations program and implement parts of plans over period of three years.

(Illinois) The State Agency received funding under the Federal Environmental Received

(Iowa) Iowa legislature appropriation for ECAP (K-6) development.

(Maryland) Current project to employ energy specialist to assist local school systems implement energy conservation education programs.

(Minnesota) K-6 Curriculum modules - Education/Energy Agency
7-12 Curriculum modules - Education/Energy Agency
Junior High Science, Social Studies Energy Modules (SDE, MEA)
Heat loss, a computer assisted home energy audit (SDE, MEA)

(Montana) Contact respondant

(Ohio) The Ohio Department of Energy funded seven energy education workshops in the Fall of 1975 and 1977. 5b) Ohio Department of Education, Division of Planning and Evaluation.

(Puerto Rico) The Puerto Rico Energy Office has met with officials of the Education Department to implement the State Energy Conservation Plan in the public schools. Mr. Luis Rafael Ortic, Assistant Secretary for Vocational Education represents the Secretary of Education on a committee organized by the Governor to deal with energy conservation. This committee has recommended a steering committee, strengthening the curriculum for teaching driving, organizing juvenile groups to stimulate energy consciousness and preparation of television and radio spot announcements.

(South Dakota) Dan Elwood \$10,000.00 Grant - Pilot 5 Energy Programs to begin Fall 1978. Director Science & Environmental Education, State Office, #3, Pierre, South Dakota 57501 (605) 773-3655

(Washington) "Conservation" - funded through the Washington State Energy Office with EPCA funds from the Dept. of Energy - energy/energy conservation literacy and attitudes, decision -making:

"Energy, Food & You" - funded through the U.S.O.S. - energy flows through the food system; net energy concepts.

"Traffic Safety Fuel Conservation Curriculum"- WSEA; EPCA; DOE



Item 5b) Are any school districts in your state presently involved in exemplary energy education programs/projects? If yes, how many?

If yes, please list the three most successful programs and the districts involved including names, addresses and telephone numbers for those persons implementing the programs:

(Arizona)

- Dysart Unified District No. 89
   Ray Hintlian (602) 977-7291
   Route 1, Box 703
   Peoria, AZ 85345
- Paradise Valley Unified District No. 69
  Dick Buscher (602) 866-1314
   3012 East Greenway Rd
   Phoenix, AZ 85032
- 3. Sunnyslope High School
  Ms. Mary Hoffman (602) 944-2251
  35 West Dunlap
  Phoenix, AZ 85021

(California)

 San Diego County Office of Education - John Gessell San Diego, Calif.

Very effective city-county environmental-energy program involving a number of public and private agencies. They have produced materials, conduct teacher workshops, and public awareness programs.

- California Energy Education Forum (see enclosed)
- 3. Southern California Edison Co. Mr. Ted Lund
  Rosemead, Calif.
  This local utility has conducted a number of excellent programs and activities, and has organized a city-county education committee similar to the one in San Diego.

(Connecticut)

- 1. Area Cooperative Educational Services 800 Dixwell Ave. New Haven, Conn. (203) 562-9967 Larry Schäefer
- Talcott Mountain Science Center
   Montevideo Road
   Avon, Conn. (203) 677-8571 . Don La Salle
- 3. Tolland High School (203) 872-0561

Item 5b - continued

# (Florida)

- Broward County School System 'Leo Butch, Director
- 2. Palm Beach County School System Don Cenicek, Director
- Lee County School System \
   William Hammond, Director \( \)

#### (Idaho)

- ,1. Mary Higdem
  Environmental Education Consultant
  132 Caldwell School District
  1101 Cleveland Ave., Caldwell, Idaho 83605
- 2. Sandy GuyonEnergy Program Manager25 Pocatello School District3115 Pole Line Rd., Pocatello, Idaho 83201
- Patsy Kim
   Environmental Education Consultant
   Boise City Schools
   1207 Fort Street, Boise, Idaho 83702

#### (Kansas)

1. Earl F. Griffith, Director Energy Adventure Center, Wichita Public Schools 2500 S. Hiram, Wichita KS 67217 (This program is just beginning)

#### (Louisiana)

1. Dr. Ronald Martin LSU - Shreveport Shreveport, LA

2. Dr. ACN. Murty Grambling State University Grambling, LA

# (Minnesota) -

Staples, Minn Designing energy activities -- building community support for several local energy programs -- energy conservation.

#### (Missouri)

Most Missouri school districts are integrating energy education programs into their sceince programs and some in the social studies programs. However, we do not have any special federal or state funded exemplar pograms.

#### (Montana)

- School District #1, Great Falls Public Schools, Great Falls, Montana 59403 Telephone: (406) 791-2350 Contact Person: Cal Ryder
- 2. Dawson County High School, Glendive, Montana 59330 Telephone: (406) 365-5265 Contact Person: John Johnson

#### Item 5b) continued

(Nevada)

EME in 6 of 17 counties 1. Paul Iverson - EME Coordinator (702) 386-0317 · Clark County School District 2832 East Flamingo Road Las Vegas, NV 89121

2. Brian.Wise - EME (702) 826-7211 Washoe Gounty School District 425 East 9th Street Reno, NV 89512

- (New Hampshire) 1. Project EASE, an ESEA IVe project of the Governor Wentworth School District directed by David Kinmond, Supt. of Schools Office, 47 Pleasant St., Wolfeboro, NH 03894 Tel: 603 569-2821.
  - 2. Comprehensive Energy Program of the Concord Union School District, Edwina Cazjkowski, 16 Rumford St., Concord; NH 03301 (Director) Tel: 603 225-3325
  - 3. Solar Construction Project, Somersworth High School, Robert Crichton, Somersworth High School, Somersworth, NH 03878 Tel: 603 692-2431

- Energy Educ. Mr. Jess Nelson, Principal, Academy chool Guymon, 0k1a. 73942 (405) 338-3371 Very good project.
- Energy Project, Mrs. Paula Baines, Chelsea Schools, Chelsea, 20kla. 74015 (918) 789-2366

(Pennsylvania)

- 1. Ronald Weaver Carlisle Area School District
  Carlisle, PA 17013
- Samuel Wenger Manheim Contral School District Manheim, PA 17545
- John Plank Marple-Newtown S.D. Newtown Square, PA 19073
- Florence School District #1 (South-Carolina) 1. Mrs. Mary China Corrie, Science Coordinator 109 Pine St. Florence, S.C. 29501



Item 5b) continued

(South Dakota) Contact people will be identify

(Utah)

1. Energy in Action (Mini-grant Ms. Elsie HassKarl Readsboro Elementary School Readsboro, Utah 05350

(Virginia) 2

- 1. Dr. William Sibley, Project AMIE, Title IV-C, Stafford County Schools, RT. 4, Box 20-A, Stafford, VA 22554 (703) 659-3141
- 2. Project\_COMSEP, Ms. Janice Wax, Title IV-C, Orange County Schools, Orange, VA 22960
- Same
- 2. Same
- Fairfax County, Doug Lapp Science Specialist 820-0340
   10700 Page Ave.
   Fairfax, VA 22030

(Washington)

Many individual teachers, school buildings, etc. No outstanding district effort.

(Wisconsin)

- Ms. Bernadelle Toser Cooperative Educational Service Agency 7 801 Hwy, 10 West Stevens Point, WI 54481
- 2. Don L. Manley
  Energy Education Project
  UW-Whitewater
  Whitewater, WI 53190
- Fred Posthuma Westfield High School Westfield, WI 53964

(Wyoming)

- Natrona #1 Casper, Kelly Walsh H.S. Mrs. Elizabeth Horsh (307) 237-2511. Teacher of science - wide range of energyenvironment classes and activities
- 2. Laramie #2. Pine Bluffs 82082 Tom A. Henretty Asst. Superintendent (307) 245-3738. Community-wide awareness program; in follow-up activities
- Laramie #1 Cheyenne 82001 Bob Larson, Director of Ecology
   Lab (307) 634-3752 In service for teacher and administrator;
   audit program under way. Q Q



Item 5c) Has the SEA developed an energy education curriculum guide for use in the schools? If yes, please enclose a copy. (If this is not possible, please give title and brief description of the guide:

(Alabama) In progress. Cannot give info. at present time.

(Delaware) No, however one is due for publication Summer '78

It will be a two volume set (elem. & secon.) of energy learning activities and teacher resource materials.

(Florida) Districts are developing some with technical and financial aid of this office.

(Hawaii) In progress

(Idaho) We are currently working on this with the office of Energy.

Guides will be developed for secondary level in math, language arts, health, environmental education, science, home economics and business education.

(Illinois) We did hire an outside consultant firm to develop curriculum materials for our energy workshops, which we just concluded (see copy enclosed).

(Iowa) ECAP K-6 🛸

(Louisiana) Curriculum Guide #1391

(Maryland) Energy - A Contemporary Issue (9-12)

(Minnesota) Only a literacy framework.

(Montana) Work commences Summer '78

(New Mexico) Teacher Supplement to Energy Conservation Understanding & Activities for Young Reople. Expands on ideas and concepts in EC, U&AFYP. Presently out of print.

(New York) "Living Within Our Means: Energy & Scarcity," K-6, ₹-12

(North Dakota) Probably will.

(Ohio) Copies enclosed.

(Cklahoma) Enclosed in secondary mailing.

(Rhode Island) Attached.

(South Dakota) In process-Will send in Oct. 1978 -

Item 5c. - continued

(Texas) In process of being developed

(Utah) 1. Sub-Chapter - Utah Environmental Education Guide

2. Energy Conservation in Driver Education (In print Summer '78)

(Washington) Energy, Food & You; Create Tomorrow Today (out of print); Conservation Curriculum Materials (draft undergoing revision)

(Virginia) 2 The Virginia Energy office has developed drafts of an activity guide, "Energy in the Classroom"

#### S.E.A.s

Item 5e) Please list other materials developed by the SEA concerning K-12 energy education (other than c).

(Arizona) See attached

(California) Note: We do not distinguish between energy and environmental education. All programs and activities cover both on an integrated basis.

(Florida) See enclosures.

(Georgia) Elementary Science - Guide (under development) for grades K-5 will be devoted by about 25% to Energy-Matter Interrelationships

(Indiana) SAVE - Student Action for Valuing the Environment

(Iowa) After we tabulate our secondary survey we contemplate developing secondary materials if surveyed teachers perceive a need:

(Maryland) Environmental Education - A Maryland Approach

(Minnesota) Listed under 5a

(New York) Environmental Quality: A Community Concern Env. Ed. Infusion Units, 7-12 Man Builds, Man Destroys (Energy Edition) Solar En. Ed. Project Materials

(Puerto Rico) The SEA will forward additional materials to my office shortly and these will be sent to the Education Commission.

(South Carolina) Energy is included in the Source Book for Environmental Education.

(Virginia) 2 Environmental Education (Guide K-12)

(Washington) Traffic Safety Fuel Conservation Curriculum
1978 Conserv Action Sun Day Energy Watch Galendar and Task Cards (Task Cards under development) ConservAction Krazy Kits (Part of ConservAction Quarterly Newsletter)
"A Thousand Suns" - a film



Item 6 - What teacher inservice activities for K-12 energy education (if any) has the SEA provided? Please describe (or attach copies of programs/brochures, etc.)

(Alabama) I have worked with local system in inservice program at their request.

Planned for Aug. will be 5 regional workshops to introduce new units.

(Science grade 5 & 8, social studies grades 6 & 9 and driver ed.)

(Delaware) We have conducted several inservice courses (8 hours) on general energy information and teaching resources available for about 200 teachers in Del.

(Florida) State Conference - Energy Edu.
Regional Conf. - " "
Local Workshops - " "

(Idaha) We have held regional energy workshops with sessions on transportation, buildings & maintenance & curriculum. We have sponsored or co-sponsored energy-education conferences for teachers, solar technology workshops, youth conferences and the Energy Conservation Corps (5th grade EME Program) (Energy sessions are included in all our environmental education workshops)

(Illinois) The Ill. Office of Ed. conducted a series of seven workshops throughout the state. (See brochure enclosed)

Indian 2 days regional workshops to introduce state guidelines - Total Envir-Ormen Education - Energy is integral part of guidelines.

(Iowa) To receive an energy conservation activity packet an Iowa elementary teacher must go through a minimum of  $1\frac{1}{2}$  hours of inservice. Frequently this is three hours Over 2,000 teachers were inserviced in 1977-78.

(Minnesota). Organized regional and interdisciplinary consortia of colleges provided 1,500 dollars in seed money to fund appropriate inservice efforts. Currently, these are being organized, reviewed and funded. SEA and MEA are also going to fund several persons who would travel to various schools (on  $\frac{1}{100}$ ) service days) to provide one—shot short workshops upon request.

(New Hampshire) Since 1973, the SEA has sponsored or co-sponsored approximately 12 one-day in-service programs on Energy Education.

(New York) Re: Solar Project

(Ohio) The Department's Division of Educational Redesign and Renewal provides teacher inservice workshops on the enclosed publications.

(Oklahoma) 1976 Summer Workshop - 2 weeks background, field work, curriculum development.

1976-77 Inservice Workshops during school year in 10 different locations. Curriculum development.

(Pennsylvania) A statewide series is being planned for Fall, 1978. See attached brochure.



Item 6 - continued

(Rhode Island) Joint conference held with Governor's Energy Office for elem. & second. Science teachers concerning solar energy.

(South Carolina) Teacher-student training programs have been offered to num-

(Utah) On-going workshops Energy Conservation Corps.

(Vermont) 5 Regional Workshops

(Wisconsip) Has cooperated in conferences in which major emphasis on energy was apparent.

(Washington) ConservAction workshops

Energy, Food and You - inservice

ETV Introductory Program (Part of Create Tomorrow Today)

(Wyoming) Energy Awareness, Audit, Curriculum in Natuona #1, Laramie #1 & 2, Campbell #1, Niobrara #1, Sheridan #2, Teton #1. (Virginia) 2 Workshops on request from LEA's Workshops have been provided at the annual science teachers conference for sev. years These have/included panel discussions by energy producers. Consumer advocates, the V Energy Office, and workshops by university personnel.

#### S.E.A.'s

Item 8 - Additional comments describing SEA's involvement in K-12 energy education:

(Arkansas Seminars at the high school level for more than 70 schools per year reaching more than 6000 students. Seminars for senior student teachers at the college and university for more than 1000 students annually.

(Connecticut) State Dept. of Ed. has sponsored a number of energy workshops for teachers over the past three years.

(Florida) The office of Environmental Education is the vehicle for introducing all environmental programs which might be useful to Florida's schools.

All such programs must be interdisciplinary in nature.



<u>s</u> (continued)

Item 8 - continued

(Georgia) I refer to Energy Ed the peing a function of the formal schooling process. The state energy office the public electric and gas utilities vigorously themote public aware trigy", e.g. fuel, management principles.

(Idaho) My is a bilities are mainly with the area of Proficiency Testing, so our level a byolvement in energy edication has diminished for FY 1978 and FY 1979.

(Indiana) In the process of employing two full time energy ed. consultants to design and implement an energy ed program.

(Iowa) In Iowa, and I feel this should be national, we do not deal with energy education as a seperate entity. We operate on the premise that materials circulate and energy flows. These are our "basics" and therefore to present a total picture for multidisciplinary curposes we deal with energy/environmental/conservation programming. To seperate them is confusing, frustrating and serves only a marginal purpose. The teacher (user) and child are defiged with too many fragments.

(<u>kansas</u>) There is activity but no definite plan as yet.

energy conservation materials and activity guides into our presentation and activities. We will be working closely with the Dept. of Natural Resources in the development of an energy curriculum lide for grades K-12.

(Maryland) About to get started.

Item 8 - continued .

(MinMesota) We have an interagency agreement with the MN Energy Agency We are working cooperatively with some of the energy suppliers to set up a. number of mini-grants to teachers in order to fund a pet project. participants will be provided with an up-date with respect to energy education and energy problems and at the end of the year we will bring everyone together for a sharing session. We will also sponsor an energy institute for stidents (juniors) with the help of energy suppliers (Missouri) Articles on energy education have been included in the Department's publications Missouri Schools; Newsletter, Commissioner's letters to School Administrators. Energy education workshops are available from the Missouri Department of Natural Resources (state office of energy); Department of Conservation, and Department of Elementary & Secondary Education. (Nebraska) The NE Education Dept. has assisted the University in conducting 3 week summer work ops for NE teachers on energy, sponsered & supported financially by ERDA. The workshop will be conducted again this summer, & again the Dept. of Ed. will assist. Also, my office assisted in selecting a state Ed. Energy Coordinator for the prgy office, and we are working closely to secure ilot schools for the Iowa Energy Packets, and also toward the development of unit this summer in the UNL-ERDA workshop; to be distributed in NE.

(Nevada) co-promoters of EME.

(New-Hampshire) The Commissioner of Education has created an Energy Education Task Force to promote the incorporation of energy conserns into the school curriculum. Robert Holt, listed in response to question I is currently the chairman of that task force.

Item 8 - continued

(New Mexico) Mineral cooperative efforts between (state) Energy Resources Board and SDE. Our staff and time available with present assignments make other efforts difficult. We are in an energy-source abundant state but haven't met the challenge of educating our youngsters fully in this regard as yet. We need additional staff and/or time to carry out this obligation.

(New York) The SEA has <u>no</u> funds specifically earmarked for energy education.

(North Dakota) Some material has been sent to the schools. Have urged schools to consider the energy problem.

(Ohio) The Department's Energy Assistance Office has a sub-committee responsible for promoting energy education in the classroom. Also, efforts are being made to obtain outside agency funding to develop Department energy education conservation packages in the areas of pupil transportation, food services and school plant maintenance.

(Oklahoma) I have been promoting energy ed/conservation since 1970. Articles, letters, inservice, workshops have been a part of the program.

There is a great need for State Science Supervisors to convene in order to decide the role of energy education in the curriculum and to produce such a statement for national dissemination. Larry McKinne, Président, Council of State Science Supervisors.

(<u>Puerto Rico</u>) In order to meet the deadline established for completing this questionnaire, it was not possible to thoroughly investigate the activities of the P.R. Department of Education. Contrary to the contiguous 48 states there is only one public education system in Puerto Rico and more time would be needed for a complete reply. Since the instructions indicated



Item 8 (continued)

Puerto Rico (continued).

that a separate questionnaire was being sent to the Department of Education I assume it will provide more information.

(South Carolina) Development of Interfaced Curriculum Activities which use energy oriented activities to teach the basic skills of the other subject areas. Continued dissemination of The Energy Book.

(South Dakota) All Research, Inservice & Awareness has been done by Dan Elwood. The SEA has given no money to support. The SOE has given SEA (Dan Elwood) \$10,000 to pilot programs in the Fall of 178.

(<u>Virginia</u>) 1 - No decision on who should be providing leadership - Energy Office of SEA - have earmarked some Title IU-e funds for energy education projects.

(Samoa) There is absolutely none existing at the present time.

(<u>Washington</u>) At a recent retirement dinner for a public power official the guest of honor and 2 other people were described as the "inventors of energy education in the US" One of those people is our environmental education supervisor. Energy education in WA pre-dated the Arab oil embargo. We continue to invent because the job is far from finished.

(<u>Wisconsin</u>) The problem in this state is the overload of assignments which each subject area supervisor has. (The E.E. position is only ½ time) Little time remains for energy education.



#### S.E.O.s

Item 2 - If K-12 energy education was not a component of your original ENERGY CONSERVATION PLAN, do you now have appeducation program being implemented through your office?

(Colorado) Energy and Man's Environment, Energy Conservation Corps pilot program of unit for &-12 multi-disciplinary based on Colo's home energy scorecard. (Type "C" audit)

(Connecticut) The OPM does not have a specific K-12 curriculum development program. However, we provide energy information upon request to K-12 and post secondary students. We have been involved (we initiated programs) in energy conservation education efforts with civic groups, vo-tech schools, specific K-12 feachers. Some of these measures are now funded under SSECP - measure 1600. (Supplemental State Energy Conservation Plan)

(Hawaii) K-6. "Sammy Saver's Wonderful World of Energy" book for grades 4,5,6 prepared by Ala Moana Jaycees and Ad. Club II (with State Energy Office funding support). Also curriculum development contract with U. Hawaii Curriculum R& D Group, College of Education for Grades 7 through 12.

(Indiana) The Energy Group is contracting with the Indiana Dept. of Public Instruction to develop a K-12 energy education curriculum to be implemented through in-service workshops during the next 2 years.

(Kansas) We are just starting to develop.

(Maine) The text of our revised plan is enclosed. (From cover letter:) At the present time 50% of one person's time is spent on energy education in our office. The State Department of Education and Cultural Services does not presently have a Science curriculum person to work with us in this area. However we do draw upon their resources in media, grants management and curriculum development when possible. If the Energy Extension Service is funded in this State in the next year or so our approach to energy education will undergo some revision. In the meantime we hope to reach many of Maine's teachers - of all subject areas and grade levels - through the Audubon book (which hasn't been printed yet), the minigrants program and an in-service education program.

(Minnesota) Our energy education program is only partially funded by EPCA and other federal funds. I have enclosed a summary of our projects.

(Mississippi) Our Driver Energy Education program does include curriculum material for Drivers' Ed. classes. We will monitor the State Dept. of Education's Curriculum development office as the science area prepares guides to be ready Jan. 79. We will provide literature at their request.

(Missouri) We are presently planning a teacher's workshop for curriculum development: This program comes under our Public Education and Awareness section.

(Montana) Copy of plan is enclosed. Also see question #6.

(North Dakota) Being developed by the University of North Dakota.

(Wisconsin) The state is currently involved in the development of a K-12 Energy Education Plan. At present no state "program" is currently being "implemented" into the schools. The state planning of such a programs is currently being developed.

#### S.E.Os

Item 4 - Please list members of your staff who have responsibilities for K-12 energy education (include titles, addresses, and telephone numbers)

(Alabama) Name: Donna Bentley

Title: Education Specialist Program Coordinator -

Add.: 111 Coliseum Blvd.
Dept. of Education

Montgomery, Ala.36130

Phone: (205) 832-5850 (205) 832-5010

Fred O. Braswell III

Alabama Energy Mgt. Bd. 3734 Atlanta Highway Montgomerv. 13

Montgomery, Ala. 36130

(Arizona) Name: . Tom Lynch

Title: Chief Energy Programs OEPAD Add.: Rm. 507 1700 W. Washington Phoenix, Arizona 85007

Phone: (602) 271-3303

(Colorado) Robert P. Brown Name:

Title: Director of Community Programs Address: 1410 Grant St. Suite B-104

Denver, CO 80203 (303) 839-2507

(Connecticut) Name: Carolyn West

Title: Planning Analyst Add.: OPM, Energy Division 20 Grand St.,

\*Hartford, Conn. 06115.

Phone: (203) 566-5885

(Flòrida) Name: Rosalyn B. Tillis (State Energy Office)

Title: En. Ed. Coordinator Add.: 301 Bryant Bldg:

Tallahassee, Fla. 32304

Phone: (904) 488-6143



#### .E.O.'s (continued)

Item 4 - continued

(Georgia)& Name: Ed Bistany

Title: Director/ Program Operations Add.: Room 615, 270 Washington St, S.W.

Atlanta, Georgia 30334

Phone: (404) 656-5176

(Hawaii) Name: Carilyn'Ogawa

Title: Energy Specialist

. Add.: Suite 1515

1164 Bishop St.

Honolulu, Hawaii 96826

Phone: (808) 548-4091

(Idaho) Name: (208) 345-4849 Kathy Puckett

Title: Education Program Mgr.

Address: Idaho Office of Energy, Statehouse, Boise, ID 83720 

(Indiana) Name: Linda Glickman Brenda Bush

Title: Residential Coordinator Special Programs Director Add.: 115 N. Penn. 7th floor Same

Indianapolis, Ind. 46204 Same

Phone: (317) 633-6753 Same

(Kansas) Name: Lyle E. Goltz

Title: Conservation Specialist Add.: 503 Kansas Avenue

Add.:

Topeka, Kansas 66603 / Phone: (913) 357-5272

Bob Johnston Terry Wilson (Kentucky) Name:

Director, Division of Consultant for Environmental Education Conservation, KY. Dept. Title:

of Energy

Capital Plaza Tower Capital Plaza Tower Add.:

Frankfort, KY 40601 Same (Phone) (502) 564-2106

Name: Catherine Murray (Maine) →

Title: Energy Conservation Program Specialist Office of Energy Resources, 55 Capital St.

Augusta, Maine 04333

~ Phone: (207) 289-2196

(Minnesota) Name: Dorothy Hozza

Title: Manager, Information and Education

980 American Center Bldg.

150 E. Kellogg Blvd.

St. Paul, Minn. 55104

Phone: (612) 296-8492

Name: Bill Neal (Driver Ed.)
Title: Project Coordinator
Address: 1307 Woolfolk Bldg.

Jackson, Miss. 39202 (601) 354-7406

(Missouri) Name: Judie Cartee Page Williams
Title: EO II , Clearinghouse Coordinator
Add.: MO Energy Program,
Dept. of Natural Resources, P.O. Box 176
Jefferson City, MO 65102
Phone: (314) 751-4000

Phone: (314) 751-4000

(Montana) Name: Louise Moore •

Title: Home Energy Specialist

Title: Home Energy Specialist
Add.: Montana Energy Office, Capital Station
Helena, MT 59601

Phone: (406) 449-3940

(Nebraska) Name: Gary A. Lay Larry Riegel
Title: Education Coordinator Director, Conservation Programs

Add: 301 Centennial Mall S. Same
Lincoln, Neb. 68509
Fhone: (402) 471-2867 Same

Fhone: (402) 471-2867. Same

(Nevada) Name: Kelly L. Jackson
 Title: Assist. Director
 Address: 1050 E. Williams, Suite 405
 Carson City, NV 89710 (702) 885-5157

(North Carolina) Name: Jan Fitzgerald
 Title: Energy Conservation Specialist
 Add: P.O. Box 25249
 Raleigh, N.C. 27611
 Phone: (919) 733-2230

(North Dakota) Name: Clay Dunlap
 Title: Energy Office
 Address: 1533 North 12th St.
 Bismarck, ND 58501 (701) 224-2250

(klahoma) Scott Julian

ma) Scott Julian
Energy Management Officer
Oklahoma Dept. of Energy
4400 N. Loncoln Blvd. Subte 251
(405): 521-3941

Dakota) Judy Hohmann
Energy Conserv. Prog. Dir.
Capitol Lake Plaza
Pierre, SD 57501



Item-4 - continued

(Tennessee) Cynthia Oliphant

· Chief Energy Conser@ation-Progs. Program Manager Public Educ.

Tennessee Energy Authority

Suite 707

Capitol Blvd. Bldg.

Nashville, Tenn. 37219

(615) 741-6671

Craig Guthrie

TEA

Suite 707 ,

Suite 707 Capitol Blyd. Bldg.

Nashville, Fenn. 37219

(615) 741-6671

(Utah) Name: Douglas E. Thompson

Title: Information Specialist
Add: 455 E. 400 South #303
Salt Lake City, UT 84111

Phone: (801) 533-5424 .\*\*

(Virginia) Name: Kathy Erickson
Title: Information and Energy Education Program Coordinator

Add.: 823 East Main St. Richmond, VA 23219

Phone: (804) 786-8451

(West Virginia) Name: Rick Johnston Beach Vickers

Title: Program Coordinator/ Information Representative

Add.: 12622 Greenbrier St. Same Charleston, WV 25311 Same

Phone: (304) 348-8860 Same

(Wisconsin) John H. Thoman

Energy Education Specialist 201 State Office Bldg. I West Wilson, Madison, Wisc.

(608) 266-5389

Wyoming) Name: Lynn Dickey

Title: Energy Conservation Coordinator

Add.: Capitol Hill Office Bldg

Cheyenne, Wyo. 82002

Phone: (307) 777-7131

S.E.Q.s

Item 6 - Additional comments describing your office's involvement in K-12 energy education:

(Alabama) This office administers the State Energy Conservation Plan in accordance to PL 94-163 and PL 94-385 (ECPA and EPLA). We have a contract with the State Dept. of Education to conduct the Curriculum Development Program. .(Copy enclosed).

(Arizona) Funded "Project Power" \$25,000 - pilot project to develop conservation projects and education in 16 school districts. For further info. contact Ariz. dept. of education Dr. Gary Emanuel, 1535 W. Jefferson, Phoenix, AZ 85007

#### Item 6 - continued

(Arkansas) Our office plans to produce K-12 energy education curricula in the near future for implementation in Arkansas schools.

(California) Please see copy of ECPA - Phase II (attached)

(Colorado) Involvement will increase as part of EES .

(Connecticut) As part of EES, CES is undertaking specific K-12 energy curricular/education programs in several of its eight county offices.

(Florida) We'have sponsored a statewide conference and workshops. Our master plan is being implemented. Materials are being developed. We have a special small grants program being implemented by the office of Environmental Ed. of the Fla. Dept. of Ed. - 55 school district projects are now under way.

(Georgia) Preliminary investigation into a more comprehensive energy education program will begin shortly.

(Hawaii) "Class C" Energy Audit workbooks under ECPA for residential sector is being distributed via schools (students take home to parents).

(Idaho) Commitment to energy conservation education through the state energy conservation plan (see enclosed)

(Indiana) Technically, we are working for the governor's office. Perhaps in the near future, the Dept. of Agriculture will also be involved in energy education.

(Kansas) Working with state education agency and school administrators to incorporate energy education into school curriculum.

(Kentucky) Funding for this program measure in Kentucky's Energy Conservation Plan is provided to the State Depriment of Education under contract with the Kentucky Department of Energy.

(Louisiana) The State Supplemental Plan has a program measure to develop a K-12 manual for use in the Louisiana school system. This program measure should begin this summer (1978) and the manuals should be available to the school system by January 1979. The Department of Education, whom I assume will also reply to your questions, has a booklet currently in the school system.

(Maine) Our office is part of the Governor's office, so our energy education efforts constitute the involvement of the Governor's office.

(Minnesota) The State Education Department and Energy Agency have signed a cooperative agreement which says, in effect, that both have to sign off on energy education projects that either one funds.



Item 6 - continued

(Mississippi). We have supplied educational packets, and curriculum material prepared by NSTA (Science Teachers Assn.) for DOE, to teacher summer workshops.

(Missouri) We are currently reviewing educational materials prepared by other groups.

(Montana) Montana Energy Office has a contract with the Montana Office of Public Instruction to develop Energy Education Curriculum Guide Books. This would be a series of 4 books divided into K-3, 4-6, 7-9, 10-12. Activities will be geated so they can be implemented into regular subjects being tauget ie - social studies, math, science and home economics. Completion date is Spring 79.

(Nevada) Our program is being implemented through Energy and Man's Environment. The State Coordinator is Paul Iverson, 609 Purcell, Las Vegas, NV 89107.

(New Hampshire) We have received and are distributing to Public Schools copies of "Science Activities in Energy" (Oak Ridge Associated Universities) and "Your Energy World" (U.S. Dept. of Energy). We also have a dozen or so films and energy games which are available on free loan to schools. (See attached lists)

(New Jersey) 1. Teacher's Resource Book on Energy is being written; should be published in fall, 1978; is New Jersey specific. Nov. 1978 - testing an Energy Checklist. 2. Program for elementary students in small group of schools. 3. Introduction of an energy conservation and alternate energy technology components into the vocational program.

(North Carolina) The Energy Division coordinates the entire State Energy Conservation Plan and contracts with certain state agencies to implement certain portions. In the area of public education the Science Division, N.C. Department of Public Instruction is the Read agency for energy education in K-12.

(Oklahoma) We also have an energy van that puts on Energy Demonstrations at schools. Attached is a brochure in that program.

(South Carolina) We are at present sponsoring "ORAU" Energy Today and Tomorrow" and attempting to get some DOE sponsored energy kits accepted by the Dept. of Education

(South Dakota) SD will utilize the curriculum offered ("Energy & Man's Environment Inc."

(Tennessee), Copy of 7012 guide enclosed

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S.E.O.'s (continued)

Item 6 - continued

(Utah) Most of our work has been done through a contract with the State Board of Education and they have subcontracted with Energy and Man's Environment to do most of the actual curriculum development, etc.

(Virginia) The Virginia Energy Office is planning an extensive statewide educational promotional campaign to be kicked off in the Fall of 1978.

(West Virginia) Plans for the 1978-79 school year include a cooperative effort with the State Department of Education in developing a residential energy conservation curriculum for Senior High Students and a drivers Education curriculum. Office's greatest involvement is working with individual teachers in developing special classroom energy projects.

#### LEGISLATURES

Item 1: Has the legislature enacted any laws, passed any resolutions or made any recommendations regarding kindergarten through 12th grade (K-12) energy education in the state's schools?

(Illinois) Enclosed are copies of 80th General ssembly Senate Bills 738, 893, and 918. Synopsis - Amends School Code. Provides for "Energy Week" to be proclaimed by the Governor annually, to be observed in the schools.

(Nowa) Attached. Enacted in 1976 \$93.7 (14) requires the energy policy council to develop and assist in implementing energy education programs. The programs are not required curriculum in K-12. Bills on this have been proposed but not enacted.

(Kansas) In Senate Sub. for HB 2973, enacted in 1978, the Director of the Kansas Energy Office is required to "formulate in cooperation with the State Board of Education a statewide energy conservation curriculum that will assist in the development of a conservation ethic among the residents of Kansas. This interdisciplinary program shall cover the areas of energy sources, uses, conservation, and management."

(Michigan) House Bill 5114 proposes development of a curriculum designed to encourage the teaching of energy conservation in the schools.

(Montana) HJR 75 (1977) - House Natural Resources Committee - Urges local school districts to implement energy conservation measures such as conserving fuel in pupil transportation and constructing and maintaining school buildings so as to minimize energy waste. The resolution affirms that need for strong instruction to school children in the limited supply of nonrenewable resources and the necessity to change our lifestyle to accommodate this fact of life.

(Nebraska) No. However, LB 232, 1977 Session contained language, to the effect that the State Energy Office shall, "inform and educate the public about energy and energy alternatives."

(Pennsylvania) Under the Federal Augmentation Appropriation Act of 1977, \$47,000 was appropriated for environmental education and \$13,000 for an updated version of the Environmental Impact Manual of Electrical Power Generation.

(Rhøde Island) The Board of Regents of Education made a recommendation to the superintendents of the schools that one hour per week should be given up for energy education through all grades.

#### LEGISLATURES

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Item 2: Is there a legislative committee(s) whose responsibilities include K/12 energy education?

(Arizona) If there were such legislation.

Committee - House Education Chairperson - Rep. James Cooper

Senate Education . " Sen. Morris Farr

Item 2 - continued

(Arkansas) Jt. Interim Committee Sen. Clarence Bell Rep. Ray Smith

(Connecticut) Were any such legislation to be proposed it would come under the jurisdiction of the Education Committee. Sen. Richard F. Schneller and Rep. Abraham Glassman, Co-Chairmen.

(Delaware) Senate and House Standing Committees exist in Delaware that could do something, but as of this date nothing has been done. Sen. McDowell, Rep. Darling.

- (Florida) Senate Committee on Education: Chairperson Curtis Peterson
- (Georgia) Committee House Education Committee, Chairperson Rep. Ben Ross Committee - Senate Education Committee, Chairperson - Sen. Hugh Carter
- (Hawaii) Comm. House Committee on Education, Chairperson Rep. Torman Mizuguchi Comm. - Senate Committee on Education, Chairperson - Sen. Stanley Hara
- (Illinois) Comm.- Education: Senate Elementary and Secondary, Chairperson Sen. Arthur Berman Comm.- House Elementary and Secondary Education,
  Chairperson Rep. J. Glenn Schneider
- (Iowa) Senate Committee on Education, Chairperson Sen. Joan Orr
  Senate Committee on Energy, " Sen. James Gallagher
  House Committee on Education, " Rep. John Patchett
  House Committee on Energy, " Rep. Mary O'Halloran
- (Kansas) No, not specifically. Most likely candidates are:

  Comm. Education, Chairperson (House) William J. Reardon, (Sen.)
  Joseph C. Harder

Comm. - Energy and Natural Resources, Chairperson - (House) Donald E. Mainey (Senate) Charlie Angell

Comm. - Ways and Means, Chairperson - (House) Fred L. Weaver (Senate) Winton.
Winter

(Kentucky) Committee - Education, Chairperson - Sen. Allen

- (Louisiana) Comm. House Natural Resources, Chairperson Rep. Billy Tauzin
  Comm. Senate Natural Resources, " Sen. Claude B. Duval
- (Mississippi) This would probably be the responsibility of:

  Comm. Education (House) Chairperson Rep. George W. Rogers, Jr.

  Comm. Education (Senate) " Sen. Jack Tucker
- (Michigan) House Comm. on Education Rep. Lucille H. McCollough Senate Comm. on Education Sen. Jack Faxon



# Legislatures (continued)

Item 2 - continued

(Missouri) Senate Education Committee, House Education Committee

(Montana) Comm. - Natural Resources, Chairperson - Rep. Art Sheldon/Sen. Elmer Flynn Comm. - Education " - Rep. Ann Mary Sussault/Sen. Chet Blaylock

(New York) Assembly Committee on Education, Chairperson - Assemblyman Stavisky Senate Committee on Education, "- Senator Donovan

(Pennsylvania) Senate Education Committee, Chairperson - Sen. Jeanette F. Reibman House Education Committee (Subcommittee on Basic Education), Chairperson - Rep. J.W. Lincoln

(South Dakota) Education (Senate Committee), Chairperson - Sen. Leroy Hoffman Education (House Committee), " - Rep. Les Kleven

(Virginia) Senate Education, Chairperson -Robert R. Nelson House Education, "- Joseph P. Albright

(Wisconsin) Education and Revenue, Chairperson - Sen. Gary R. Goyke
Education, " - Rep. Richard A. Flintrop

(Wyoming) Joint Education Interim, (Temporarily Vacant) Energy education has not beer considered, but would be in the Committee's jurisdiction.

# LEGIȘLATURES

Item 3: Has the legislature appropriated any money for K-12 energy education since FY 1973? If yes, approximately how much during 1977?

(California) \$25-30,000 1975, 76, 77, 🕸

(Iowa) The program mentioned in I above would be funded with federal monies received under the Energy Policy and Conservation Act of 1976.

(Pennsylvania) \$60,000

# LEGISLATURES

Item 6 - Additional comments describing legislature's involvement in K-12 energy education:

(Alabama) The Alabama legislature is not generally involved in specific curriculum decisions:

(Florida) Legislation has been passed regarding energy conservation in school facilities. Energy education as a specific topic has not been addressed by the Florida Legislature. Should energy education laws be proposed, the Committee on Education would deal with them.

# Legislatures (continued)

Item 6 - continued

(Idaho) The State Department of Education had a 1-year contract with the Idaho Office of Energy in FY 1976 for an experimental Energy Conservation Environmental Education Program.

(Kansas) 1978 Legislature adopted House Concurrent Resolution 5004 - requesting the State Board of Education to provide leadership in implementing, in school districts, state goals in environmental education. The State Board of Regents is requested to emphasize environmental awareness in teacher preparation programs.

(Kentucky) What efforts are being made are taking place by means of the usual responsibilities of the appropriate agencies.

K-12 - Senate Advisory Committee with representatives from dept. of education, dept. of energy, school boards, power and gas companies. Working committee trains teachers paid for by grant from private industry and FEA. Legislature, does mandate environmental education and conservation of resources in elementary and secondary schools (NRS 389.110 - NRS 389.130) Contacts; Mr. Jack O'Leury, Educational Consultant, State Dept. of Education, 400 W. King St., Carson City, Nv. 89710 - Mr. Paul Iverson, Coordinator for Energy and Man's Environment, Clark County School District, 2832 E. Flamingo Rd. 89121 (Las Vegas)

(New York) Enclosed are energy education pamphlets from the State Education Department and the State Energy Office.

(Oklahoma) The legislature has been only marginally involved in the promotion of K-12 energy education.

(Rhode Island) A special task force has been set up to work in league with the governor's energy office, in assisting teachers with instruction of strategy and in producing a small guide book.

(South Carolina) No state legislative action - but with use of federal funds, a mobile unit travels to high schools and junior high schools with programs concerning "Energy - Today & Tomorrow" - also programs directed toward consumer through state universities and technical education centers.

For further information, contact the State Energy
Management Office at 1205 Pendleton St., Columbia, SC; phone: 758-2050.



Legislatures (continued)

Item 6 - .continued

(South Dakota) The legislature has not designated any interest in supporting an energy education program. Currently, plans are for an energy education curriculum for K-12 to be implemented through the Dept. of Education and funded initially by the Office of Energy Policy.

(Utah) Energy office has contract with the state board of education to teach energy saving methods for public school personnel.

(Vermont) Legislature has left it to Executive, to great extent.

(Virginia) See the curriculum guide sent to you by the Virginia energy office.

(Washington) There has been no emphasis of energy education in any legislative deliberations to date.

#### GOVERNORS

Item 1 - Who in the governor's office (if anyone) has the responsibility for energy education in the schools (K-12)?

(Alabama) Donna Bentley (205) 832-5850
Environmental - Energy Education Specialist

111 Coliseum Boulevard
Montgomery, Alabama 36109

(Colorado) none official
Robert P. Brown (unofficial) (303) 839-2507
Director of Community Programs
Colorado Office of Energy Conservation
1410 Grant
Denver, CO 80203.

(Florida) Mrs. Huette Higgs (904) 488-3050 Governmental Assistant Office of the Governor, The Capitol Tallahassee, Florida 32304

(Georgia) Mark Zwecker (404) 656-5176
Deputy Director/ GA Office of Energy Resources
Room 615, 270 Washington Street, SW
Atlanta, Ceorgia 30334

(Hawaii) Hideto Kono (808) 548-6914 Energy Resources Coordinator P.O. Box 2359 Honolulu, Hawaii 96814

(New Hampshire) Roger Aubin (603 271-? Director Energy Conservation

Phil Arel (603) 271-2711
Program Manager - Education
26 Pleasant St.
Concord, NH 03301

(North Carolina) Dr. Quentin W. Lindsey (919) 733-6500 Science and Public Policy Advisor Office of the Governor - Dept. of Administration 116 W. Jones St., Raleigh, NC 27603

(Oklahoma) "This is the responsibility of the state supt. and not the gov."

(South Carolina) Robert J. Hirsch (803) 758-2050
Director
SC Energy Management Office

(Utah) Douglas Thompson (801) 533-5424 Information Specialist - Utah Energy Office 455 E. 400 S. #303 Salt Lake City, Utah 84111 105



#### Governors (continued)

ltem l - continued

(Delaware) David L. Press
Governor's Energy Advisor
P.O. Box 1401, Townsend Building
Dover, Delaware 19901 (302) 678-5644

(Indiana) Raymond W. Rizzo (317) 633-5288
Executive Assistant to the Governor
Governor's Office - State House
Indianapolis, Indiana 46204

(Tennessee) Now handled by the Tennessee Energy Authority 250 Capitol Hill Building Nashville, TN 37219

Edward J. Spitzer

(Virginia) Mr. Goerge L. Jones (804) 786-1151 Coordinator of Energy and Emergency Services 7700 Midlothian Turnpike Richmond, Virginia 23235

(Wyoming) Lynn Dickey (307) 7/77-7131 Energy Conservation Office Capitol Hill Office Bldg. Cheyenne, Wyo. 82001

#### GOVERNORS

Item 2 - Has the Governor issued an executive order or statement which affects K-12 energy education since 1973?

(Delaware) Executive Order No. 9 established energy commission. Copy of said Order is attached.

(Florida) SUN DAY (see attached material)

(Ohio) Governor signed AmSub. H.B. No. 419 (enclosed) on May 8, 1978, which required that all public schools emphasize and encourage energy and resource conservation beginning in the primary grades.

#### GOVERNORS

.If funding, what was approximate amount during 1977?

Please describe the nature of involvement, if any:

(Alabama) The Alabama Management Board has the State Plan for conserving energy in Alabama. The State Department of Education has the Education Facilities Plan as a part of that State Plan. The State Department of Education also has Curriculum Development as part of the same plan.

(Golorado) The Colo. Office of Energy Cons. is a branch of the Governor's Office and funds two education projects as part of the State Supplemental Plan of Public Information.

(Delaware) The Governor's Office initiated through the Energy Commission the development of the curriculum and solicited federal funding to cover the cost of the project. A draft of the curriculum will be available in early summer.

(Florida) The Legislature has not appropriated any money, per se, for energy education as a line item allocation. However, out of the \$2.2 million appropriated for energy conservation, public information, etc. (ECPA), \$175,000 is allocated for use for energy education from the State Energy Office. A portion of this \$175,000 is granted to the Environmental Education Office of the Department of Education for mini-grants. Schools desiring money for energy education submit sub-grant requests to the Environmental Education Office for approval/award.

State Board of Education approval of energy education matters (Governor - Askew is Chairman)

State Board of Education approval of capital outlay solar energy education school construction projects.

(Georgia) \$2,250

The Energy Education for Drivers Program is designed to develop and implement a curriculum supplement for teachers dealing with energy efficient driving and automoblile maintenance practices. The Office of Energy Resources is funding the program through the State Energy Conservation Plan, while the State Department of Education is taking the lead in implementation.

(Hawaii) \$3,000

Sponsors federal project applications, initiates contractual support for curriculum development, and underwrites projects to a limited extent.

(Indiana) The Indiana Energy Office, at the direction of the Governor's Office, has funded the Curriculum Division of the Indiana Department of Public Instruction for a two year, two Phase Program for Energy Curriculum Development (Phase I 1978 K-6, Phase II 1979 (2012)). The total cost of the program will approximate \$200,000. It will be a curriculum in fusion process. The DPI has been funded with an additional \$90,000 for an Energy Conservation Program for Drivers Training.



#### Governors (continued)

Item 3 - continued

(New Hampshire) As part of the States Energy Conservation Plan, the Education Program Measure comprises public education as well as energy education. To date, I have compiled education material, including games, films, background data, and curricula. All of these materials have been made available to NH teachers. In addition, speakers are available to schools and classes for presentations. We expect a more active role for the coming year in developing curricula and hosting seminars for teachers.

(Oklahoma) for 1978-79 Physical Plant refurbishing as result of energy audits.

(South Carolina) Assisted in the preparation of "The Energy Book" a curriculum guide for K-12 teachers prepared by the SC Education Department. Provided reference materials for "The Energy Book". Distributed special energy information packets for teachers and mailed each K-12 school library a copy of Energy Outlook (A guide to energy in SC).

(Utah) Approx. \$40,000 See enclosed conservation plans

(Virginia) Under the State energy conservation program funded by EPCA and EC grants, the Division of Energy of the Office of Energy and Emergency Services conducts energy conservation programs through local school systems.

(Wyoming) We funded the Energy and Man's Environment series, as a pilot program in 40 elementary classrooms around the state.

We are looking into forming a curriculum review board to review the diverse and numerous curricula coming into the state.

# **GOVERNORS**

(Delaware) Governor's Office

(Georgia) Cooperative Extension Service'

(Hawaii) University of Hawaii

(Indiana) Governor's Office

(Oklahoma) Higher Ed.

(Virginia) Institutions of Higher Education

(Wyoming) Energy Extension Service

# GOVERNORS

Item 5 - Additional comments describing your office's involvement in K-12 energy education:

(Alabama) Curriculum Development is holding local in-service at the request of the LEA. Scheduled in August is five workshops to introduce new curriculum units (Science, grades 5-8, Social Studies, grades 6&9, and Driver Education).

The Energy Conservation Section deals with the physical plants in conserving energy, such as mini-audits of schools in Alabama.

(Alaska) Currently the State Department of Education in the State Office of Energy, are cooperating in collecting information that might be used by local school districts. However, these matters are basically in the planning stage and any programs currently operating have been initiated at the local level.

(California) The concept of promoting energy education in elementary and secondary schools has not been an issue at the state level in California.

This office and newly established solar energy agencies have been promulgating and distributing information regarding energy alternatives.

(Colorado) Involvement includes the Energy and Man's Environment, Energy Conservation Corps and the creation of a curriculum unit based around the Colorado Home Energy Audit

(Georgia) 1978 funding for Energy Education for Drivers is\$31,727.

Preliminary investigation into a more comprehensive energy program will begin shortly.

(Hawaii) The Governor's office is responsible for coordinating K-12 energy education support through the Department of Planning and Economic Development, the Department of Education, and the University of Hawaii. The Director for the Department of Planning and Economic Development, the Superintendent of Education and the President of the University of Hawaii are members of the Governor's Cabinet.

(Indiana) Energy Education has been designated as a priority by the Governor. Adequate funding has been committed for the program. The Energy Office has on Staff an Energy Education Coordinator, and the D.P.I. Curriculum Division has an Energy Curriculum Development Staff.

(New Hampshire) A group called the Energy Action Committee has been formed to evaluate existing energy curricula and determine which is appropriate for NH schools. The committee includes staff members from the state energy office, the state education department, as well as elementary, secondary and Vocational Technical College teachers. They are looking at programs recently developed by NH educational organizations. They may develop curriculum as well, if they determine that there is a need thereof.

In addition, this office attempts to keep informed and coordinate energy-education developments of various groups working in that area throughout the state.



#### Governors (continued)

Item 5 - continued

(New Mexico) New Mexico's legislature passed a memorial making the State Dept. of Education responsible for K-12 energy education. Since however, the State Dept. of Education is a constitutional entity responsible to an elected board (and not the Governor) the executive branch has participated and cooperated by promoting poster contests, disseminating conservation info., etc.

(North Carolina) Our office has not been directly involved in energy education. Energy education in North Carolina is handled by the Division of Science Education and School Planning in our Dept. of Public Instruction and the Energy Division in our Dept. of Commerce. The state has an energy state plan which addresses energy education as well as many other energy matters.

(Ohio) Department of Energy is working with State Department of Education to develop energy education program.

Prefious work done by Battelle Memorial Institute under sponsorship by Department of Education. Funds provided by Department of Energy. (Materials enciosed)

(Oklahoma) 1976 - Energy Advisory Committee formed

1976 - Summer workshop for teachers sponsored

1977 - Energy materials printed

1976-77 - Över 30 state workshops for teachers 1977-78 - 15 state workshops for teachers

1977 and 78 - Cooperated with OSU on summer workshop for teachers

(Oregon) We have an environmental education specialist who works with local districts and the Dept. of Energy in energy education efforts.

(Tennessee) The Office of Legal Services is a staff office of the Tennessee General Assembly providing legal research and counseling, bill drafting and committee staffing. We are involved in the formulation of legislation, but have no involvement in the administration of programs.

(Wisconsin) The Dept. of Administration acts on behalf of the governor in . matters such as energy education. The state office of planning and energy within the Dept. of Admin. has had the lead responsibility in this regard.

The state budget office (within Dept. of Admin.) and the state Dept. of Public Instruction have cooperatied with the office of planning and energy.

APPENDIX B

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# Criteria for Judging Agency Involvement/Non-Involvement

An SEA was judged "involved in promoting K-12 energy education" if three or more affirmative responses to the following items were received:

- a. someone on staff responsible for K-12 energy education?
  - b. issued policies, recommendations, guidelines and/or rules?
- c. completed or is involved in energy education research?
- d. knowledge of exemplary programs?
- e. developed an energy education curriculum guide?
- f. recommended usage of one or more nationally available energy educational programs?
  - g. conducted teacher inservice training in energy education?

SEO's were judged "involved" if they have implemented or are implementing K-12 energy education activities.

A GO was judged "involved" if an executive order/statement had been issued regarding K-12 energy education and/or funds had been appropriated for any form of energy education.

SL's were judged "involved " if they had "enacted laws, passed resolutions and/or made recommendations" and/or appropriated funds for K-12 energy education.



# APPENDIX C

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#### SUBMITTED MATERIALS

## Agency

# SEA's

, Arizona State Board of Education

California Department of Education

Florida Department of Education

Illinois Office of Education

Indiana Department of Public Instruction

Minnesota State Department of Education

Montana Office of Public Instruction

Mevada State Board of Education

## Title

"Recommendations of the Energy Education Task Force to the State Board of Education"

## Project Power

"Action Projects for CEEF"

Energy and Water - Conservation Suggestions

Palm Beach County Utility
Management Program

Computations About the Sources and Conservation of Energy

I'm Saving Energy With Les Fuel!

Broward County Energy Conservation Program

Energy Workshop brochure

The Challenge of Energy Education

Total Environment Education

#### Heat Loss.

Energy Activities for Junior High Science

#### Montana Schools - Inside-Out

"A Position Statement for Energy Education and Energy Conservation"



#### Agency

<u>SEA's</u> (continued).

Ohio Department of Education

Oklahoma State Department of Education

Pennsylvania Department of Education

Commonwealth of Puerto Rico
Office of the Governor

Rhode Island Department of Education

South Carolina Department of Education

South Dakota Department of Education

Virginia State Department of Education

#### Title

A Teacher's Introduction to Energy and Energy Conservation

(Elementary and Secondary)

Oklahoma Energy...Energy Awareness Education - Grades K-3

Oklahoma Energy...Energy Awareness Education - Grades 4-12

Oklahoma Energy...Energy Awareness Education Resource Materials-Energy Education Activities

Pennsylvania Education.

Energy - Pennsylvaina's Energy
Curriculum for the Middle
Grades\*

List of materials developed by SEA

Energy Education - Resource Guide

The Energy Book

"Energy & Man's Environment" Workshop itinerary

"Instructional Resources on Energy"

Environmental Education Guide K-12

Energy in the Classroom - Activity
Guide for 8-12

"Bibliography of State Approved Resources Related to Instruction on the Energy Crisis"

#### Agenty

# <u>SEA's</u> (continued)

Washington State Office of Public Instruction

Wyoming State Board of Education

# SEO's

California Office of Energy

Florida State Energy Office

Georgia Office of Energy Resources

Idaho Office of Energy

Kansas Energy Office

Kentucky Department of Energy

## Title

"1978 Sun Day" - Energy Watch Calendar

Energy, Food, and You.

"Proposed Resolution for the Wyoming State Board of Education"

"Background Information for Possible State Board Adoption of an Education Energy Policy"

"Al3. Energy/Energy Conservation Education (K-12)"

"Florida's Energy Policy"

**Energy Conservation** 

Florida Master Plan and Action Guide for Energy Education

"Energy Education for Drivers Program"

Excerpt from "Idaho State Energy Plan, 1977-78"

"Senate Substitute for HOUSE BILL No. 2973 By Committee on Energy and Natural Resources"

"Public Education Curriculum Measure (Supplement)"

Energy Conservation Activities fon the Classroom K-12

# <u>Agency</u>

# SEO's

Maine Office of Energy Resources

Michigan Energy Administration

Minnesota Energy Agency

Mississippi Energy Office

Montana Energy Office

Nebraska Energy Office

New Hampshire Governor's Council on Energy

South Dakota Energy Conservation Program

Utah Energy Office

#### Title

"Energy Education Program"

"Energy Extension Service" information and evaluation
materials

"Inter-Action Agreement Between The Minnesota Department of Education and the Minnesota Energy Agency"

"Minnesota Energy Agency/Education Department Energy Education Program"

Excerpt from legislation which created the Minnesota Energy Agency

"Driving to Conserve Fuel and Energy"

"Introduction to Program Measures 10, 10a, & 11"

"Energy Education. Program Considerations"

"Energy Education Materials From the Governor's Council on Energy"

Excerpt from State Energy Plan

1978 Program for Energy Conservation in Utah

#### Agency

SEO's (continued)

West Virginia Fuel and Energy Office

Wyoming Energy Office

SL's

Illinois Legislature

Iowa Legislature

Michigan Legislature

Montana Legislature

Néw York Legislature

Ohio Legislature

Pennsylvania Legislature

<u>G0's</u>

Alabama Governor's Office

#### Title

"Energy Education Program
Overview of the Program Measure,
Objective and Commitment of
Program Requirements"

Excerpt from State Energy Plan

Text of Senate Bill 893

Text of House Bill 918 (Amended)

Text of Senate Bill 738 (Amended)

Excerpt from Bill 93.7 (14) Energy Policy Council

Summary of House Bill 5114

List of bills related to energy and conservation education •

Text of House Joint Resolution No. 75

"A Conference on Solar Energy Education"

Excerpt from Am. Sub. H.B. No. 419

Text of Senate Bill 874 (House amended)

Excerpt from "Alabama Energy Conservation Plan, 1978"

GO's (continued)

Delaware Governor's Office

Ohio Governor's Office

Utah Governor's Office

"Executive Order Number Nine -The Establishment of the Governor's Energy Resource Management Commission"

Text of "An Act" (Amended Substitute House Bill No. 419)

A Proposed Program for Energy Conservation in Utah